



ATLAS
OR
FYRIE COLOM

*Wherein are lively Portrayed all the knowne
Coasts of the whole OCEAN.*

*By
Iacob Colom.
Printed by himselfe dwelling on the
Corne-market in the Fyrie Colom.*

in AMSTERDAM.

with Priviledge Au: 1668.





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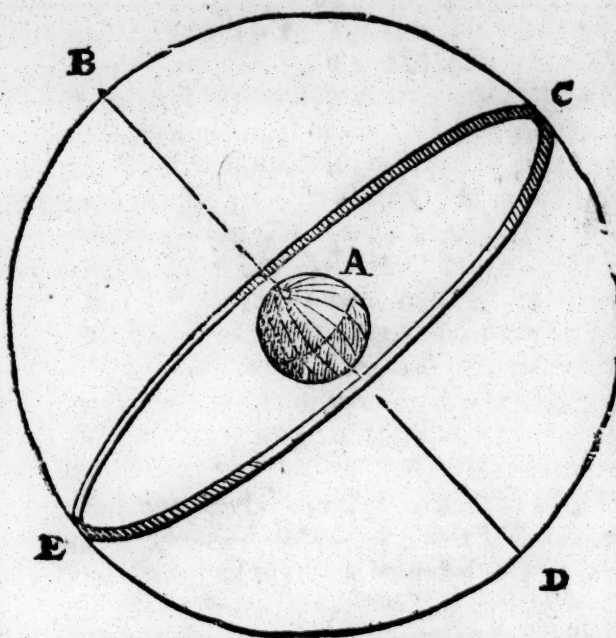
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A breefe Instruction in the art of Navigation.

Of the two poles of World.

THe Earth with the waters doe make both together a perfect and just round Globe, which all the Mathematicians by good & infallible reasons doe confirme, as also by experience is found so to be. This Globe, the Eternall and omnipotent God hath firmly placed in the middle of the World, as the Center or middle point there of and hath placed the havens as a hallow Globe, with such an unmeasurable wyneffe round about the same, that the distance thereof is equally set, and separated from the earth in all places, like unto the compasse of a circle, which is equally drawne and separated from the middle point thereof: and hath so ordained, that every 24 hours it is carried about the World: by which daylie motion, it draweth with it all the heavenly lights, as the Sunne, Moon, and all the Starres, which also by that means in 24 houres are carried round about the whole World, as is dayly seene. The moving or stirring of the heavens is brought about upon two sure points, that stand directly one against the other, in such manner, as if a bale should be turned round upon two pins, as upon an Axeltre. Suppose that you see a straight line, streaching out from one of the 2 foresaid point of the heavens to the other, like unto an Axeltre of the World, that passed right through the center, that is through the middle of the earth and two points aforesaid, the Poles or Axeltre points of the World, the one named the South Pole: Now that this may be better understood, I will manifest it by this figure.



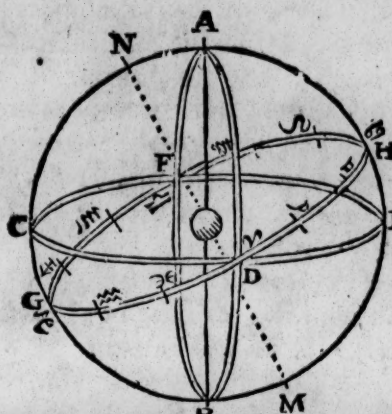
at B is called the north Pole, and the other at D the S. Pole, upon which the havens (as I said before) every 24 houres are moved and borne round about the whole Earth.

Of the Equinoctial Line.

The whole circle of the Heavens is divided into 360 degr. or steps, so that by the former chapter we may perceive, that the two Poles are distant one from the other 180 degr. that is a half circle of the heavens. Right in the middle between both the Poles we suppose a circle to be placed, which we call Line, or the Equator, and is so called because that when so ever the Sun cometh to his circle the day and night are of one length through out all the World. This circle is in all places equally distant from both the Poles of the World, to wit, 90 degrees. and divided the heavens into two equal parts, whereof the one reached northward, and is called the north part, the other southward, and is called the south part, as is plainly seen in the former figure: where you see the south part, as is plainly seene in the former figure: where you see the chindle, B C is the Equinoctial line, standing both of one length from the Poles E D, deviding the Heavens into two equal parts, as the north part E B C, and the S. Part E D C.

Of the Ecliptica line or Sunne-way.

The Line Ecliptica lieth thwart over against the Equinoctial deviding the same upon two points, right over against each-other, in two even a like parts, and is also divided through the foresaid 2 a like parts, the one lieth betwixt the Equinoctial and the northern Pole, the other betwixt the Equinoctial and the southern Pole, the most part is drawing off on both sides of the Equinoctial to both Poles in 23 degrees, 31 and an halfe minutes. The Ecliptica is divided in 12 parts, each of the same is described with a particular marke. The Sunne goeth along this Circle (without eternal turning out) and runneth through the same once every year with her owne native running, and so as the Poles of the World doe stand all over even farre of the Equinoctial, also hath this Ecliptica his two Poles al over even far or distant from the same.



Explication.

In these figure are (as before) AB the Poles of the World, CDEF the Equinoctial, G D H E the line Ecliptica, dividing the Equinoctial, and also himselfe, in 2 a like parts, in points D and F, which are called Equinoctials, the one on D the Equinoctium of the Spring, the other on F the Equinoctium of the harvest. The one halfe part DHF (being the norther part) lieth betwixt the Equinoctial DEF, and the A Norther Pole, upon the most on EH, turning off three, and twentie degrees, 31 minutes and an halfe, the other halfe part FGD (the souther part) lieth betwixt the Equinoctial F C D, and the souther Pole B, as also upon the most part, like as C G, turning off 23 degrees, 31 minutes, and an halfe. The north part is divided in six signes, which are called the northermost, beginning on D, with rising signes to the north, Aries, Taurus, Gemini, untill H, the point of the most drawing off. From thence with the down-going signes of the North, Cancer, Leo, Virgo, untill the Equinoctial Line in E. the Equinoctium of the harvest. The souther part is also divided in sixe signes, which are called the southermost, beginning on F, with the down going signes to the south, Libra, Scorpius, Sagitarius, untill G, the point of the most turning off to the south, from thence forth with the rising signes to the north, Capricornus, Aquarius, Pisces till againe on the Equinoctial Line, and the Equinoctium of the Spring D. The 3 first northermost signes runneth the Sunne through of the 21 of march, til the 21 of June, the other of the 21 June, til the 23 of Septemb. The first 3 southermost of the 23 Septemb. til the 23 of December, the other of the 23 of December, til againe to the 21 of March. The Poles of the Ecliptica are, & N. standing al over even farre from the Ecliptica G H, & so farre from the Poles of the Earth A & B, when the Ecliptica upon the most is drawing off from the Equinoctial Line on H E and C G, to witt, 23 deg. 31 min. and an halfe.

Of the Colures.

Coluri are 2 Circles, going crosse-wise through both the Poles of the World, deviding each other in the Poles in 2, and together the whole Sphera Equinoctial, Sodiack, or Ecliptica, & al Parallels in 4 a like parts, the one going through the points of the Equinoctes, called Colurus off the Equinoctes, the other through the points of the Solstities, the Colurus of the Solstities. The Sunne touching these Circles (through his yearly running in the Sodiack) devideth the yeare in four parts, to wit, Spring, Summer, Harvest, and Winter.

Explication.

In this former Figure is AFED, the Colurus of the Equinoctes; going through D and F, points of the Equinoctes, in the beginning of Aries and Libra, and through the Poles A and B A C G B M E H, the Colurus of the Solstities, going through H & G, points of the Solstities, in the beginning of Cancr & Capricorni, where the Ecliptica is upon the most drawing off from the Equinoctial line, through the Poles of the World, and Sodiack M and N, cutting one another through crosse-wise with right corners in the Poles A and B, and deviding the Sodiack or Ecliptica in 4 parts, as DH, HE, and G D, where of the Sunne in the first takes his course in the Spring, the Second in the Summer, the third in the Summer, the third in the harvest, and the fourth in the Winter.

These foresaid Circles of the Sphere, are al great Circles, that is upon the widest of the Sphere round about written, deviding the same alwaies in two a like parts. There follow further four little Circles, which doe devide the Sphere in unlike parts.

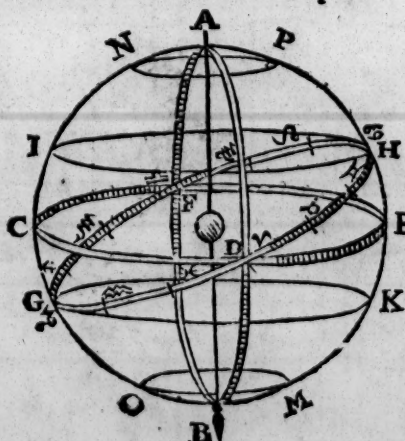
Of the Tropikes and Circles Arcticus and Antarcticus.

Tropici are two Circles, the one northward, and the other southward of the Equinoctial, and even wide with the same, which through the turning round about of the Sphere, of the points of the Ecliptica, is described to be the widest distant from the Equinoctial the one to the north called Tropicus Cancr, the other to the south, Tropicus Capricorni.

Circulus Arcticus, the norther Circle, and Circulus Antarcticus, the souther Circle, are (through the turning round about of the Sphere) described of the Poles of Ecliptica.

Explication.

In this figure is the Tropicus Cancr or Sunne turning of the kreeft, which through the turning round about of the Sphere is described of the point of H, the beginning of Cancr is also called, because the Sunne, (comming on that point upon the widest from the Equinoctial to the north) turneth then againe through the kreeft unto the Equinoctial, G, K, is the Tropicus Capricorni, Sun turning of the



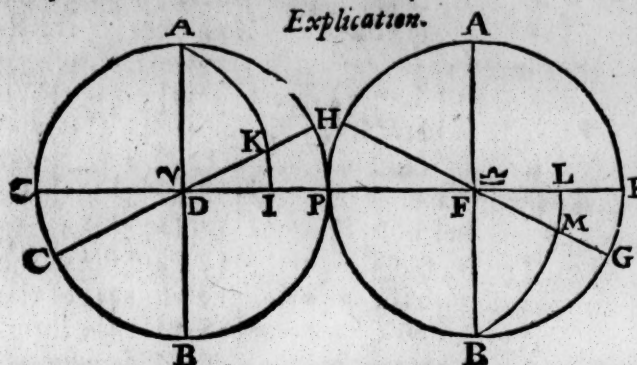
A briefe Instruction off the Art off Navigation.

of the Stone-bock, is described through the turning round about of the Sphere of the point G, the beginning of Capricornii is so called, because the Sun, coming on that point upon the widest from the Equinoctiall to the south, turns then again through to the Stonebock to the Equinoct al.

N P, is the Circulus Arcticus, and M O, the Circulus Antarcticus, which are described through the turning round about of the Sphere, of the Poles of the Sodiad N and M. These are even farre distant from the Poles of the World A and B, also as the Tropicus from the Equinoctial line, to wit, 23 de grees, 31 minutes and a half.

Of the Declination of the Sonne.

The Declination of the Sunne hath his distance of the Equinoctiall line, the same is devideth in two parts: to the N. and to the S.



N H G the Eclipticaline. The Sun upon th 21 of March comming in the beginning Aries on D, comes also in the Equinoctiall line and hath therefore no Declination, northerly nor southerly but going forth along the Ecliptica of D to H, and comming til on K, in the beginning of Cancr, that all be removed or declined from the Equinoctial line to the north, from I to K, 11 degrees, 30 min. Going so forth till on H, is upon the most declined from P to H, 23 degre. 31 min. and a half. From thence following his course from H, to F, comes in the beginning of Libra again on the line without Declination. Going forth from F to G, til in M, the beginning of Sagitary, he shal then be removed or declined from the line F E, to the south of L unto M, 20 degr. 13 minutes. Comming on G, he is from E to G declined to the south, from thence he runnes then on D, againe on the Equinoctiall line, finishing the same running in a year.

For to finde the Declination of the Sunne upon every day of the year.

The Sunne-year (that is the time that the Sun goeth out a certaine point in the Ecliptica, and turneth againe in the same) is even with 355 dayes, but about 5 houres and 49 minutes more (that is somewhat lesse then 6 houres) wherefore men must alwayes after 3 yeares unto the fourth, 4 times 6 houres (that is a day in February) bring thereunto, for to count the year or revolution of the Sunne in even dayes, the same fourth year is therefore called the leape year. If you then will sett the Declination of the Sunne by the Tables of the Day, then you must needs make 4 Tables afunder of 4 yeares following after another. The foresaid difference, that foure revolutions of the Sunne doe not even agree with

such 4 yeares, brings in time so much difference in the Declination, that it is necessary at least every 20 yeares to renew such Tables. For to finde out of such Tables upon every day of the year the Declination of the Sunne must needs two things be knowne, the first, in what year we are; or in the leape-year, or in the first, second, or third thereafter. The second, what Table men must use to such a well known year.

For the first, devide the yeares of our Lord above 1600 through 4, if the deviding comes even out, without being to much, such year is then a leape year of 366 dayes, but if out of the deviding remains any number, the same will shew your desire how many yeares it is after the leape yeares.

Explication.

I desire to know what for a year the year, 1648 is, leaving the 1600 I devide these that are over 48, through 4, that comes even out without remaining (for 12 times 4 is 48) whereby I finde the year 1648 to be a leape-year.

II. Explication.

For to know what the year 1647. may be for a year, leaving the 1600, I devide the 47 through 4, and finde that there remaine 4 (for 11 times 4 is 44, the same from 47, remains 3) out of which I finde the year 47. to be the third year after the leape year.

For to know the same without account, looke upon this following little Table, the first Columne are leape-yeares, the second third & fourth Columnes, are 3 yeares after the leape-yeares.

Leape yeares	First	Second	Third.
1648	1649	1650	1651
1652	1653	1654	1655
1656	1657	1658	1659

The second, for to know what Table men must use, for every year, that stands above each of the following Tables noted.

I Explication.

In the second year after the leape-year upon the 20 of May, I desire to know the Declination of the Sunne, I seeke in the Tables, in the second year of the moneth May and there under in the first Columne, the figgers of the twentieth day, finde there besides in the second Columne 20, 6, that is 20 degrees, 6 minutes the Declination of the Sunne. And because that is betwixt the 20 of March and the 23 September, (that the Sunne is by north the Line) also is the Declination northerly.

II. Explication. Upon the 12 February of the Leape-year I desire to know the Declination of the Sunne, and seeke therefore in the Table of the Leape-year the moneth of February & count in the first Columne the 12 day, finde there next unto 13 degre. 43 min. before the Declination of the Sunne upon the same day, because that is betwixt the 23 of September, and the 20 of March, that the Sunne goeth by south the line, the Declination is then southerly.

Here follow the Tables of the Declination of the Sunne, justly accounted upon the length of the Earth, of the Meridiaen of Englands-end, the reason is because they are most used about the length of the Netherlands, mariners; as well in doing on of the Channell of the Sea, as alongs the Coasts of France, Portugall, and Spaine.

Table, of the Declination of the Sunne. New style, Vpon the first year, after the L E A P - Y E A R E.

Januarius.	Februari.	Martius.	Aprilis.	Majus.	Junius.	Julius.	Augustus.	Septemb.	October.	Novemb.	Decemb.
da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.
1 23 5	1 17 8	1 7 13	1 4 55	1 15 22	1 22 13	1 25 9	1 17 57	1 8 6	1 3 27	1 14 44	1 22 1
2 23 0	2 16 51	2 6 50	2 5 18	2 15 40	2 22 21	2 23 5	2 17 42	2 7 43	2 3 51	2 15 3	2 22 10
3 22 54	3 16 33	3 6 27	3 5 41	3 15 57	3 22 28	3 23 0	3 17 26	3 7 21	3 4 14	3 15 22	3 22 18
4 22 48	4 16 16	4 6 4	4 6 4	4 16 14	4 22 35	4 22 55	4 17 10	4 6 59	4 4 38	4 15 41	4 22 26
5 22 41	5 15 57	5 5 41	5 6 27	5 16 31	5 22 42	5 22 49	5 16 54	5 6 37	5 5 1	5 15 59	5 22 34
6 22 34	6 15 39	6 5 17	6 6 50	6 16 48	6 22 48	6 22 43	6 16 37	6 6 14	6 5 24	6 16 17	6 22 41
7 22 27	7 15 20	7 4 54	7 7 12	7 17 5	7 22 54	7 22 37	7 16 29	7 5 52	7 5 47	7 16 35	7 22 47
8 22 19	8 15 1	8 4 30	8 7 34	8 17 21	8 22 59	8 22 30	8 16 3	8 5 29	8 6 10	8 16 52	8 22 54
9 22 10	9 14 42	9 4 7	9 7 57	9 17 37	9 23 4	9 22 21	9 15 46	9 5 6	9 6 33	9 17 9	9 22 9
10 22 2	10 14 22	10 3 43	10 8 19	10 17 52	10 23 8	10 22 15	10 15 28	10 4 43	10 6 56	10 17 25	10 23 4
11 21 52	11 14 3	11 3 19	11 8 41	11 18 8	11 23 13	11 22 7	11 15 10	11 4 20	11 7 19	11 17 42	11 23 9
12 21 43	12 13 43	12 2 56	12 9 2	12 18 23	12 23 16	12 21 58	12 14 52	12 3 56	12 7 42	12 17 58	12 23 14
13 21 33	13 13 23	13 2 32	13 9 24	13 18 47	13 23 20	13 21 55	13 14 33	13 3 34	13 8 5	13 18 14	13 23 18
14 21 22	14 13 2	14 2 9	14 9 46	14 18 52	14 23 23	14 21 41	14 14 14	14 3 11	14 8 27	14 18 30	14 23 21
15 21 11	15 12 41	15 1 45	15 10 7	15 19 6	15 23 25	15 21 31	15 13 55	15 2 48	15 8 59	15 18 45	15 23 24
16 21 0	16 12 21	16 1 21	16 10 28	16 19 19	16 23 27	16 21 21	16 13 36	16 2 35	16 9 11	16 19 0	16 23 26
17 20 48	17 12 0	17 0 58	17 10 49	17 19 33	17 23 29	17 21 11	17 13 17	17 2 1	17 9 33	17 19 15	17 23 28
18 20 36	18 11 39	18 0 34	18 11 10	18 19 46	18 23 30	18 21 1	18 12 58	18 1 38	18 9 55	18 19 29	18 23 30
19 20 24	19 11 18	19 0 10	19 11 31	19 19 59	19 23 31	19 20 50	19 12 38	19 1 15	19 10 17	19 19 43	19 23 31
20 20 11	20 10 56	20 0 13	20 11 55	20 20 11	20 23 31	20 20 39	20 12 18	20 0 51	20 10 39	20 19 57	20 23 31
21 19 57	21 10 35	21 0 37	21 12 11	21 20 23	21 23 31	21 20 27	21 11 58	21 0 27	21 11 0	21 20 10	21 23 31
22 19 44	22 10 13	22 1 1	22 12 31	22 20 35	22 23 31	22 20 15	22 11 37	22 0 4	22 11 21	22 20 23	22 23 31
23 19 30	23 9 51	23 1 25	23 12 51	23 20 47	23 23 30	23 20 2	23 11 17	23 0 20	23 11 42	23 20 36	23 23 30
24 19 15	24 9 29	24 1 49	24 13 11	24 20 58	24 23 29	24 19 50	24 10 56	24 0 43	24 12 3	24 20 48	24 23 29
25 19 1	25 9 6	25 1 12	25 13 31	25 21 8	25 23 28	25 19 37	25 10 36	25 1 6	25 12 24	25 20 59	25 23 27
26 18 45	26 8 44	26 2 36	26 13 50	26 21 19	26 23 26	26 19 24	26 10 15	26 1 30	26 12 45	26 21 11	26 23 25
27 18 30	27 8 21	27 3 0	27 14 9	27 21 29	27 23 23	27 19 10	27 9 53	27 1 54	27 13 6	27 21 22	27 23 22
28 18 14	28 7 59	28 3 23	28 14 28	28 21 39	28 23 20	28 18 56	28 9 32	28 2 17	28 13 26	28 21 32	28 23 19
29 17 58	29 7 36	29 3 46	29 14 56	29 21 48	29 23 17	29 18 42	29 9 11	29 2 41	29 13 46	29 21 42	29 23 15
30 17 42		30 4 9	30 15 4	30 21 56	30 23 13	30 18 27	30 8 49	30 3 4	30 14 6	30 21 52	30 23 11
31 17 25		31 4 32		31 22 5		31 18 12	31 8 27		31 14 25		31 23 6

Januar.	da. de. mi.
1	23 5
2	22 0
3	22 54
4	22 48
5	22 41
6	22 34
7	22 27
8	22 19
9	22 10
10	22 2
11	21 52
12	21 43
13	21 33
14	21 22
15	21 11
16	21 0
17	20 48
18	20 36
19	20 24
20	20 11
21	19 57
22	19 44
23	19 30
24	19 15
25	19 1
26	18 45
27	18 30
28	18 14
29	17 58
30	17 42
31	17 25

Januar.	da. de. mi.
1	23 5
2	22 0
3	22 54
4	22 48
5	22 41
6	22 34
7	22 27
8	22 19
9	22 10
10	22 2
11	21 52
12	21 43
13	21 33
14	21 22
15	21 11
16	21 0
17	20 48
18	20 36
19	20 24
20	20 11
21	19 57
22	19 44
23	19 30
24	19 15
25	19 1
26	18 45
27	18 30
28	18 14
29	17 58
30	17 42
31	17 25

A breefe Instruction off the Art off Navigation.

T A B L E.

Of the Declination of the Sunne.

New Style,

Vpon the first year, after the **L E A P - Y E A R E.**

Ianuarius. Februari.					Martius.					Aprilis.					Majus.					Junius.					Iulius.					Augustus.					Septemb.					October.					Novemb.					Decemb.				
da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.																
1	23	1	1	16	55	1	7	18	1	4	49	1	15	18	1	22	11	1	23	11	1	18	0	1	8	11	1	3	21	1	14	39	1	21	59																			
2	22	55	2	16	73	2	6	55	2	5	12	2	15	36	2	22	19	2	23	6	2	17	45	2	7	49	2	3	44	2	14	58	2	22	8																			
3	22	50	3	16	19	3	6	32	3	5	35	3	15	53	3	22	26	3	23	1	3	17	29	3	7	27	3	4	8	3	15	17	3	22	16																			
4	22	42	4	16	1	4	6	9	4	5	58	4	16	11	4	22	33	4	22	56	4	17	13	4	7	5	4	43	4	15	36	4	22	24																				
5	22	35	5	15	43	5	5	46	5	6	21	5	16	28	5	22	40	5	22	51	5	16	57	5	6	43	5	4	54	5	15	54	5	22	32																			
6	22	28	6	15	24	6	5	23	6	6	43	6	16	44	6	22	46	6	22	45	6	16	41	6	6	20	6	5	18	6	16	12	6	22	39																			
7	22	20	7	15	5	7	4	59	7	7	5	7	17	1	7	22	52	7	22	18	7	16	23	7	5	58	7	5	41	7	16	30	7	22	46																			
8	22	12	8	14	46	8	4	36	8	7	28	8	17	17	8	22	57	8	22	31	8	16	0	8	5	35	8	6	4	8	16	48	8	22	52																			
9	22	3	9	14	27	9	4	12	9	7	59	9	17	33	9	23	3	9	22	24	9	15	49	9	5	12	9	6	27	9	17	5	9	22	58																			
10	21	54	10	14	7	10	3	49	10	8	13	10	17	49	10	23	7	10	22	17	10	15	32	10	4	50	10	6	50	10	17	22	10	23	3																			
11	21	44	11	13	48	11	3	25	11	8	35	11	18	4	11	23	11	11	22	9	11	15	14	11	4	27	11	7	13	11	17	39	11	23	8																			
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15	21	2	15	12	26	15	1	51	15	10	1	15	19	3	15	23	24	15	21	33	15	14	0	15	2	54	15	8	43	15	18	42	15	23	23																			
16	20	51	16	12	5	16	1	27	16	10	22	16	19	17	16	23	27	16	21	24	16	13	41	16	2	31	16	9	5	16	18	58	16	23	26																			
17	20	39	17	11	44	17	0	3	17	10	44	17	19	31	17	23	29	17	21	13	17	13	21	17	2	7	17	9	27	17	19	12	17	23	28																			
18	20	26	18	11	23	18	0	40	18	11	4	18	19	44	18	23	30	18	21	2	18	13	3	18	1	44	18	9	49	18	19	27	18	23	29																			
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T A B L E.

Of the Declination of the Sunne.

New Style,

Vpon the Second year, after the **L E A P - Y E A R E.**

Januarius.			Februari.			Martius.			Aprilis.			Majus.			Iunius.			Iulius.			Augustus.			Septemb.			October.			Novem.			Decemb.			
da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.	da.	de.	mi.				
1	23	3	1	16	59	1	7	24	1	4	43	1	15	13	1	22	10	1	23	11	1	18	4	1	8	17	1	3	16	1	14	35	1	21	57	
2	22	57	2	16	42	2	7	1	2	5	7	2	15	31	2	22	17	2	23	7	2	7	49	2	7	55	2	3	39	2	14	54	2	22	6	
3	22	51	3	16	24	3	6	38	3	5	30	3	15	49	3	22	24	3	23	3	3	17	33	3	7	33	3	4	2	3	15	13	3	22	14	
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7	22	23	7	15	10	7	5	5	7	7	0	7	16	57	7	22	51	7	22	40	7	6	16	27	7	6	3	7	5	35	7	16	26	7	22	44
8	22	15	8	14	51	8	4	42	8	7	23	8	17	13	8	22	56	8	22	33	8	6	16	11	8	5	40	8	5	58	8	16	44	8	22	50
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10	21	57	10	14	12	10	3	55	10	8	7	10	17	45	10	23	6	10	22	19	10	4	55	36	10	4	55	10	6	44	10	17	18	10	23	2
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17	20	41	17	11	49	17	1	9	17	10	39	17	19	27	17	23	28	17	21	15	17	13	27	17	2	13	17	9	22	17	19	9	17	23	27	
18	20	29	18	11	28	18	0	45	18	10	59	18	19	40	18	23	29	18	21	5	18	13	7	18	1	50	18	9	14	18	19	23	18	23	29	
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25	18	53	25	8	55	25	2	0	25	13	21	25	21	4	25	23	28	25	19	42	25	10	46	25	0	54	25	12	14	25	20	54	25	23	28	
26	18	37	26	8	32	26	2	24	26	13	40	26	21	15	26	23	27	26	19	29	26	10	25	26	1	18	26	12	35	26	21	6	26	23	26	
27	18	22	27	8	9	27	2	47	27	13	59	27	21	25	27	23	24	27	19	16	27	10	4	27	1	41	27	12	55	27	21	17	27	23	23	
28	18	6	28	7	47	28	3	10	28	14	18	28	21	34	28	23	22	28	18	2	28	9	43	28	2	5	28	13	15	28	21	28	28	23	20	
29	17	50				29	3	34	29	14	37	29	21	44	29	23	19	29	18	48	29	9	22	29	2	29	29	13	35	29	21	38	29	23	17	
30	17	33				30	3	56	30	14	55	30	21	53	30	23	15	30	18	34	30	9	0	30	2	52	30	13	55	30	21	48	30	23	13	
31	17	16				31	4	20				31	22	2				31	18	19	31	8	39										3	123	9	

T A B L E.

Of the Declination of the Sunne.

New Style,

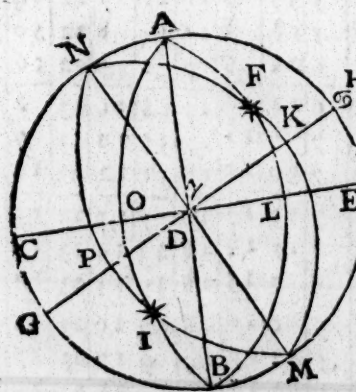
Vpon the first year, after the L E A P - Y E A R E.

Januarius.	Februari.	Martius.	Aprilis.	Majus.	Junius.	Julius.	Augustus.	Septemb.	October.	Novemb.	Decemb.
da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.	da. de. mi.
1 23 4	1 17 3	1 7 30	1 4 38	1 15 9	1 22 7	1 23 13	1 18 7	1 8 22	1 3 10	1 14 30	1 21 54
2 22 58	2 16 46	2 7 7	2 5 1	2 15 27	2 22 15	2 23 9	2 17 2	2 8 0	2 3 33	2 14 49	2 22 3
3 22 52	3 16 28	3 6 43	3 5 24	3 15 45	3 22 23	3 23 4	3 17 37	3 7 38	3 3 57	3 15 8	3 22 12
4 22 46	4 16 10	4 6 21	4 5 47	4 16 2	4 22 30	4 22 59	4 17 21	4 7 16	4 4 20	4 15 27	4 22 20
5 22 40	5 15 52	5 5 57	5 6 10	5 16 19	5 22 37	5 22 53	5 17 9	5 6 54	5 4 43	5 15 45	5 22 28
6 22 33	6 15 33	6 5 54	6 6 32	6 16 36	6 22 44	6 22 48	6 16 49	6 6 31	6 5 6	6 16 4	6 22 35
7 22 25	7 15 14	7 5 11	7 6 55	7 16 53	7 22 50	7 22 41	7 16 31	7 6 9	7 5 29	7 16 22	7 22 42
8 22 17	8 14 56	8 4 47	8 7 18	8 17 10	8 22 55	8 22 35	8 16 15	8 5 46	8 5 53	8 16 39	8 22 49
9 22 8	9 14 36	9 4 23	9 7 40	9 17 26	9 23 0	9 22 28	9 15 58	9 5 23	9 6 16	9 16 57	9 22 55
10 21 59	10 14 17	10 4 0	10 8 2	10 17 41	10 23 5	10 22 20	10 15 40	10 5 0	10 6 29	10 17 14	10 23 1
11 21 49	11 13 57	11 3 37	11 8 24	11 17 57	11 23 9	11 22 12	11 15 23	11 4 38	11 7 2	11 17 31	11 23 6
12 21 39	12 13 37	12 3 13	12 8 46	12 18 12	12 23 13	12 22 4	12 15 5	12 4 16	12 7 24	12 17 47	12 23 10
13 21 29	13 13 17	13 2 49	13 9 8	13 18 27	13 23 17	13 21 55	13 14 47	13 3 52	13 7 47	13 18 3	13 23 15
14 21 19	14 12 57	14 2 26	14 9 29	14 18 42	14 23 20	14 21 47	14 14 28	14 3 29	14 8 9	14 18 19	14 23 18
15 21 7	15 12 36	15 2 3	15 9 51	15 18 56	15 23 23	15 21 8	15 14 9	15 3 5	15 8 32	15 18 35	15 23 21
16 20 56	16 12 15	16 1 39	16 10 12	16 19 10	16 23 26	16 21 28	16 13 51	16 2 42	16 8 55	16 18 50	16 23 24
17 20 44	17 11 54	17 1 15	17 10 33	17 19 24	17 23 28	17 21 18	17 13 31	17 2 19	17 9 17	17 19 5	17 23 27
18 20 32	18 11 33	18 0 51	18 10 54	18 19 37	18 23 29	18 21 7	18 13 12	18 1 55	18 9 39	18 19 20	18 23 29
19 20 20	19 11 12	19 0 27	19 11 15	19 19 50	19 23 30	19 20 57	19 12 52	19 1 22	19 10 0	19 19 34	19 23 39
20 20 7	20 10 50	20 0 4	20 11 36	20 20 3	20 23 31	20 20 46	20 12 33	20 1 9	20 10 22	20 19 48	20 23 31
21 19 53	21 10 28	21 0 20	21 11 56	21 20 15	21 23 31	21 20 35	21 12 13	21 0 45	21 10 41	21 20 2	21 23 31
22 19 40	22 10 7	22 0 44	22 12 16	22 20 27	22 23 31	22 20 23	22 11 53	22 0 22	22 11 5	22 20 16	22 23 31
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24 19 11	24 9 22	24 1 31	24 12 56	24 20 50	24 23 30	24 19 52	24 11 12	24 0 25	24 11 48	24 20 4	24 23 30
25 18 56	25 9 0	25 1 54	25 13 16	25 21 12	25 23 29	25 19 46	25 10 51	25 0 49	25 12 9	25 20 52	25 23 29
26 18 41	26 8 37	26 2 18	26 13 35	26 21 26	26 23 27	26 19 32	26 10 30	26 1 12	26 12 30	26 21 3	26 23 27
27 18 25	27 8 15	27 2 42	27 13 55	27 21 42	27 23 25	27 19 19	27 10 9	27 1 36	27 12 50	27 21 14	27 23 24
28 18 10	28 7 52	28 3 5	28 14 13	28 21 52	28 23 22	28 19 6	28 9 48	28 1 59	28 13 10	28 21 25	28 23 21
29 17 53		29 3 28	29 14 32	29 21 42	29 23 19	29 18 51	29 9 27	29 2 23	29 13 31	29 21 36	29 23 18
30 17 37		30 3 50	30 14 51	30 21 51	30 23 16	30 18 37	30 9 5	30 2 46	30 13 52	30 21 45	30 23 14
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Of the length and breadth of the fixed Starres.

The starres of the eightest heaven are called the fixed starres, because they are (not like the Planetes, without moving) alwayes fast and fixe in one fashion & distance from each other, and together through it Primum Mobile are carried one with another round about, and are accounted after their length and broadnesse, her length is a part of the Ecliptica, gathered betwixt two half Circles, going both out of the Poles of the Ecliptica, the one through the Equinoctium of the Spring or beginning Arietis, the other through the starres selfe. Their broadnesse is a Bow of such an halfe circle, betwixt the Equinoctiall line and the starre. The same is of two sorts, northerly and southerly, the northerly stand northwards from the Ecliptica, and the southerly, southward from thence.

Explication.



Let CD be Cancer, the Ecliptical line N the norther, M the souther Poles of the same, F a certaine starre. Let be drawn out of the foresaid Poles two half circles, the one NDM through the Equinoctium of the Spring on D. The other through the starre F, cutting the Ecliptica in K, the part of the Ecliptica DK, is the length of such an starre, and the bow of a part of the same half Circles KE, his broadnesse to the north, because he standeth by north the Ecliptica.

Of the right Ascension and declination of the fixed Starres.

The right Ascension of the starres is a part of the Equinoctials, standing betwixt 2 halfe circles, going both out of the Poles of the World, the one through the Equinoctium of the Spring, the other through the starres. Their declination, a bow of such a halfe Circle betwixt the Equinoctiall, and the same starres, which are also two severall, northerly, which stands by north the Line, and southerly which stands by south.

Explication.

In the former figure is CDE the Equinoctial line, A the norther, and B the souther Pole of the World, F a certaine starre, draw out of the foresaid Poles two halfe circles, the one ADB through the Equinoctium or beginning of Arietes, the other through F the starre, the same cuts the Equinoctiall in N. The part of the Equinoctials LD, is the right

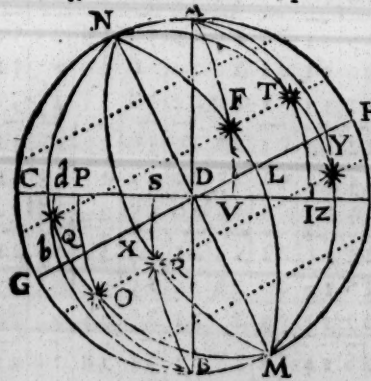
Ascension of such a starre, and the bow of the part of the same Circles, EF, his declination to the north, or OI, of the starre I, to the south.

Of the changing from the declination of the fixed Starres.

So as the Stearned heaven, upon our eye-sight every, 24 houres is turned round, through it primum mobile, upon the Affe points of the Poles of the World from the east to the west, also is the same in 25400 years once turned round upon the Poles of the Ecliptica, to the contrary from the west to the east, like as the Sunne once yearly. Through which doth change the length of the starres every 100 years 1 degrees, 25 minutes, of every 20 years 17 minutes, but their broadnesse, that is the distance of the Ecliptica, is unchange-able, alwayes the same. Through the foresaid changing of the length in time also the declination, of the one more and sooner then from the other. The northstarre, and some other more, doe change every three yeares about one minute in declination, and some can not change in 50 yeares one minute. Some growlesse, some more. Some having northerly declination, become southerly, some having southerly declination, become to the contrary northerly.

Explication.

CDE, being the Equinoctiall, A the norther and B the souther Pole of the World, GDA the Ecliptica line, NM the Poles of the same, G the beginning of Capricorni, D Arietis, and H the end of Gemini, or the beginning of Cancer. Leave (as before) the starre on F, his length is in the Ecliptica on L, his broadnesse there by north LE, his northerly declination is then VF. If the foresaid starre after some yeares, runneth in length from F to T, parallell with DH his broadnesse remains KT, even on the former FL, but his declination IT, is more then VE the first, because the parallell with DH is more



turned from the Equinoctiall line. The starre on O, whole length his in the Ecliptica on Q, and his broadnesse QO, hath southerly Declination PO, but running in length from O in R, parallell with QX, broadnesse is XR, even on QO, but his southerly declination RS, is lesser then OP, because that he parallell with GD, is come nearer to the Equinoctiall. If the same Star comes in length to runne unto Y, his Declination shall be YZ, by N the Line. That is from

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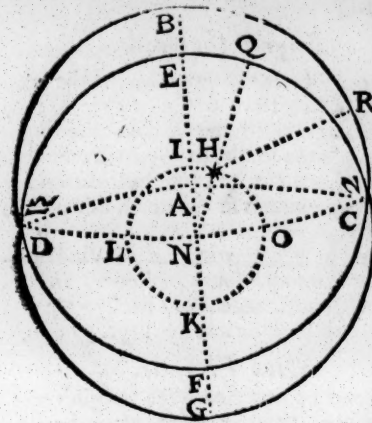
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from the first 6 signes, Capricornus, Acquarius, Pisces, Aries, Taurus, Gemini. Upon the same manner to the contrary in the other 6 signes, Cancer, Leo, Virgo, Libra, Scorpius, and Sagitarius, as followeth. In the same figure being H the beginning Cancr, D Libra, and G the end Sagitary. If a starre on T, having northerly Declination TI, runneth in length till in F, his declination FV, is lesser then TI, because he is come nearer to the Equinoctiall, but if the same in length over runneth til on B, his declination which was first N)hal then be southerly from B in D.

Through the foresaid moving of the eightest haven changeth also the declination of the northstarre, which grouwes now every yeare more, that is, he turneth how longer how more from the Equinoctiall, and comes nearer to the Pole, which shall endure unto the yeare of our Lord 2091. then shall he be upon the nearest unto the Pole, and no more then 26 minut. and an halfe distant from thence, and after that time turne by little and litle againe from thence so that he after 1270 yeares shall stand off from the Pole 47 degrees, 56 minutes. How this can be, may be plainly understood out of this following Explication.

A being the northerpole of the world, in the midst of the Equinoctiall B D F C: N the Pole of the Ecliptica, in the midst of the Ecliptica E D G C: H the north-starre, his broadnesse of the Ecliptica is QH,



66 degrees, 2 minutes, and his distance from the Pole of the Sodiack N H, 23 degrees, 58 minutes, these be alwayes the selfe same, like as the broadnesse and distance of all the fixed starres of the Sodiack-Pole as is said before, his length of the Equinoctium of the Spring, or beginning Arietis was before the yeare 1625 C Q 83 degrees 24 minutes.

Let out of N, the Pole of the Ecliptica, an Circle be written, as I L K O H, whose halfe Diametre be N H, 23 degrees, 58 minutes, even on the distance

of the north-starre of the Sodiack-pole, there within is besieged the north pole of the World A, as being somewhat lesse distant from the Sodiack pole then the north starre upon such an Circle doth the north-starre his turning round about the Sodiack-pole, so as al fixed starres, 25400 yeares) his distance from the Pole of the World is before the yeare 1645 A H, 2 degrees, 35 minut. and shall become in the yeare of our Lord 2091 through the foresaid moving, from H in I, upon the nearest on A, the Pole of the World, and stand from thence no more then 27 minut. and an half. Going forth from I, alongst L, till in K, he shall be distant from the pole of the world A K, 47 degr. 56 minutes.

Because the starres, doe not alwayes hold one declination, have we, at service of all mariners (or Sea-fearing men) prepared these two following Tables: The first sheweth her declination for the yeare 1645 the second for the yeare 1655. Besides the declination, there is put unto it the Complement of the declination, that is, how farre the same stands from the Pole.

Table off the declination off the principall fixed starres, together her distance from the Pole, upon the yeares of 1645 and 1655.

These following (standing all by south the Equinoctiall Line) have southerly Declination.

From the north-starre Alrucuba, beginneth the northerly Declination.

	Anno 1645.		Anno 1655.	
	Southerly declination.	The dist. from the Pole.	Southerly declination.	The dist. from the Pole.
	gr. mi.	gr. mi.	gr. mi.	gr. mi.
The northermost in the whales taylor.	10 46	79 14	10 43	79 17
The southermost in the whales taylor.	19 57	70 3	19 54	70 6
Regel, the left foot of Orion.	8 39	81 21	8 38	81 22
The first of the three in the Girdle of Orion, or the 3 Kings.	0 36	89 24	0 36	89 24
The second in the girdle, or 3 Kings.	1 27	88 33	1 27	88 33
The third.	2 10	87 50	2 10	87 50
The great Dogge, Syrius.	16 13	73 47	16 13	73 47
The hart of the water-snake.	7 8	82 52	7 10	82 50
Spica Virginis, or the corneare.	9 15	80 45	9 18	80 42
The south Balance.	14 30	75 30	14 33	75 27
The north Balance.	8 1	81 59	8 4	81 56
The northermost and first is the left-hand of the snakebearer Ophiuchus.	2 46	87 14	2 48	88 12
The left knee of Ophiuchus.	9 46	80 14	9 48	80 12
The right knee of the snakebearer.	15 12	74 48	15 13	74 47
Antares the hart of the Scorpion.	25 33	74 27	25 35	74 25
The northermost of the two in the horns of Capricorne.	13 33	76 27	13 32	76 28

The southermost of the two
The former or most westerly of the 2 starres in the taylor of Capricorne.
The second most easterly.
The left shoulder of Aquarius.
The right shoulder of Aquarius.
The uttermost of Aquarius named Patahand.

Alrucuba the north starre.
The middlemost or brightest of the Watchmen.
The brest of Cassiopea.
The hippe of Cassiopeia.
The knee of Cassiopeia.
The brightest in the cleare of Cassio.
The heed of Andromeda.
The Gridle of Andromeda.
The most southerly foot of Androm.
The brightest in the head of the Ram.
The brightest in the mouth of the whale.
The brightest in the head of Medusa.
The brightest in the side of Perseus.
Aldebaran the south eye of the Bul.
The north-horn of the Bull.
The south-horne of the Bull.
The left shoulder off the Gyant Orion.
The right shoulder of Orion.
Hircus or Capella in the left shoulder of the carter Erichonius.
The right shoulder of Erichonius.
The brightest in the foot of the twinnes.
The head off the northermost twinne Castor.
The head off the southermost twinne Pollux.
Procyon the little Dogge.
Regulus, Basiliscus the hart of the Lion
The middlemost and clearest in the neck of the Lion.
The brightest in the back of the Lyon.
The taylor of the Lyon.
The northermost hinderwheele off the great Wagon.
The southermost hinderwheele off the great Wagon.
The northermost forewheele of the wagon.
The souther forewheele of the Wagon.
The neereft Horse to the Wagon.
The middlemost Horse.
The southermost Horse.
Vindemiatrix the north wing of Virgo.
The Girdle of the Virgin.
The left shoulder of Bootes.
The bright star betwixt the highes off Bootes Arcturus.
The brightest in the north Crowne.
The brightest in the neck of the Serpent Ophiuchus.
The head of Hercules.
The head of the Serpenterbearer.
The brightest in the Dragons head.
Lyra.
The taylor of the Eagle.
Vultur the middlemost and brightest in the Eagle.
The brest of the Swanne.
The taylor of the Swanne.
The Gridle of Cephus.
That in the mouth of Pegasus.
Theat the brightest in the legge of Pegasus.
Marcab the foot of Pegasus.
The uttermost in the wing of Pegasus.

Anno 1645.		Anno 1655.	
Southerly declination.	The dist. from the Pole.	Southerly declination.	The dist. from the Pole.
gr. mi.	gr. mi.	gr. mi.	gr. mi.
15 50	74 10	15 49	74 11
18 10	71 50	18 8	71 52
17 39	72 21	17 37	72 23
7 48	82 56	7 28	82 58
2 08	81 0	1 57	81 3
31 25	58 35	31 22	58 38

Anno 1645.		Anno 1655.	
Northerly Declination.	Distance from the N. pole.	Northerly declination.	Distance from the N. pole.
gr. mi.	gr. mi.	gr. mi.	gr. mi.
87 23	2 35	87 28	2 32
75 40	14 20	75 37	14 23
54 37	35 23	54 40	35 20
58 49	31 11	58 52	31 8
58 22	31 38	58 25	31 35
57 13	32 47	57 17	32 43
27 9	62 51	27 12	62 48
33 47	56 13	33 50	56 10
40 36	49 24	40 39	49 21
21 46	68 14	21 49	68 11
2 40	87 20	2 42	87 18
39 33	50 27	39 35	50 25
48 31	41 29	48 33	41 27
15 48	74 12	15 50	74 10
28 16	61 44	28 17	61 43
20 54	69 6	20 54	69 6
5 59	84 1	6 0	84 0
7 18	82 42	7 18	82 42
45 35	44 25	45 36	44 26
44 52	45 8	44 52	45 8
16 40	73 20	16 40	73 20
32 36	57 24	32 35	57 25
28 50	61 10	28 49	61 11
6 7	83 53	6 6	83 54
13 40	76 20	13 37	76 23
21 37	68 23	21 34	68 26
22 28	67 32	22 24	67 36
16 33	73 27	16 30	73 30
63 40	26 20	63 37	26 23
58 17	31 43	58 14	31 46
59 0	31 0	58 57	31 3
55 41	34 19	55 37	34 22
57 56	32 4	57 53	32 7
50 49	33 11	50 46	33 14
51 8	38 52	51 5	38 55
12 54	77 6	12 51	77 9
5 22	84 38	5 19	84 41
39 50	50 10	39 47	50 13
21 5	68 55	21 2	68 58
27 57	62 3	27 55	62 5
7 37	82 23	7 35	82 25
14 51	75 9	14 50	75 10
12 52	77 8	12 51	77 9
51 37	38 23	51 37	38 23
38 30	51 30	38 30	51 30
13 24	76 36	13 25	76 35
8 0	82 0	8 1	81 59
39 9	50 51	39 11	50 49
44 3	45 57	44 5	45 55
69 1	20 59	69 3	20 57
8 16	81 44	8 18	81 42
26 10	73 50	26 13	73 47
13 19	76 41	13 21	76 39
13 13	76 47	13 16	76 44

A breefe Instruction off the Art off Navigation.

By this table you may finde the declination of any of these Starres, in the yeares betweene provided that you proportion the difference off the declination to the difference of the time.

I. Example.

I desire to know the Declination of the southermost fore-wheele of the Wagon for the year 1650. I find in the Table of the year 1645. 55 degrees, 41 minutes, and for the year 1655. 55 degrees, 37 minutes, the number proportioned as the yeares, I find 55 degrees, 41 minutes, lessening declinated.

II. Example.

I desire to know the declination of *Aldebaran*, the eye of the Bull in the year 1650. I find in the table for the year 1645. 15 degrees, 48 minutes, for the year 1655. 15 deg. 50 min. the number proportioned as the yeares, I finde 15 degr. 49 minut. increasing declination.

Instruction how men shall easily know the fixed starres, upon what time every one of the same comes on the south.

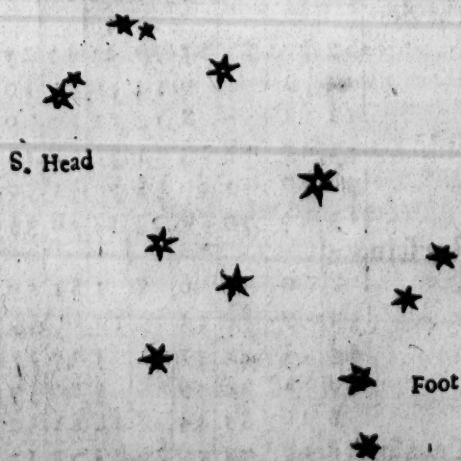
How necessary and profitable it is for a Sea-faring Man to have knowledge of the fixed starres, and how to use the same, especially in strange voyages and farre Sailings, that is well knowne by all expert and understanding Pilote; therefore, because we have in the former head-point described the declination of the fixed starres and their distance from the Pole, we will shew here a way and certaine Instruction for to know the same easily, and that it all time perfectly may beknown when each of the same comes in the south or upon the highest, and when they are fit for to be used. First, must be knowne, that the Sunne-way in the haven stands unmoveable with the fixed starres, which with the same once every day turns round, from the east to the west, without changing; but that the Sunne doth against these foresaid yearly turning, from west to the east, through which he, in his dayly going round, doth decline so much, that he in a yeare goeth once lesse round then the fixed starres, and that the fixed starres in a yeare doe turne once more then the Sunne, so that every day the same doe come 4 minutes sooner on the south, that is every weeke about an halfe houre, and every moneth 2 houres. For to understand this more plainly, we will declare that with an Example, with the starre which is called *Syrius*, or the great Dogge, which followeth alwayes a little after the Gyant *Orion*, and his Girdle, which men doe call the three Kings: sheweth a litle above the great Dogge, it is the greatest and clearest of al the fixed starres, and also most knowne of al Sea-faring men, his declination is by south the Line 16 degrees and 13 minutes, the same comes in the south the 24 of January, at ten a clocke in the evening, The 23 of February at 8 a clocke in the evening. The 28 of March at 6 a clocke in the evening. The 30 of April at 4 a clock in the evening. The 30 of May, in the after-noon at 2 a clocke. The 28 of Iune at noone about 12 a clocke, together with the Sunne. The 28 of Iuly, in the fore-noon at 10 a clocke. The 29 of August, in the fore-noon at 8 a clocke. The first of October, in the morning at 6 a clocke. The 20 of November in the morning at 4 a clocke. The 1 of December at 2 a clock in the morning. The 28 of December, in the night, at 12 a clocke.

Out of which every one can easily reckon upon what houre and time these foresaid starre upon all other dayes of the yeares comes in the south, as well by day, when a men can not see him, as by night, when a men can see him. If you also desire to know that of all other fixed starres upon al the dayes of the yeare: then you must first seeke out of that, which is before sayd, upon what houre of your minded day the great Dogge comes on the south, & afterwards out of the following description of the starres how many times such an starre, as you desire comes after or before the great Dogge on the south, then you shall finde the just and perfect time which you desire.

The countersaiting of the fixed starres, and upon what time every one of the same comes on the south.

The Twinnes.

The figure *Gemini* (in English the Twinnes) is situated direct north, from the great Dogge, or *Canis major* in the same manner as it is here described, the north head there of commeth 40 minutes, after the Dogge, into the south, his declination is two and thirtie degrees, and 37 minutes from the line northward.



The south and lowest head there of commeth 54 minutes after the great Dogge into the south; and hath his declination towards the north, 28 degrees, 51 minutes.

The clearest in the foot commeth 2 quarter of an houre before the great Dogge into the south his declination is 16 degrees, and 40 minutes towards the north.

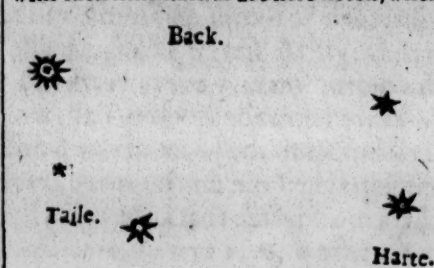
Foot

Canis minor or the little Dogge, called Canicula, Procion.

This little Dogge *Canicula*, hath 3 starres, in this forme, the clearest of them commeth 50 min. after the great Dogge into the south; his declination is six degrees, 8 minutes in the northside of the line.

The Watersnake. Hydra.

The Harte or the clearest in the *Watersnake* commeth after *Syrius* or the great Dogge two hours, 40 minutes to the south his declination is in the south side of the line, 7 degrees and 5 minutes and shew it selfe with such little stars as are here noted, whereby he is easily knowne.

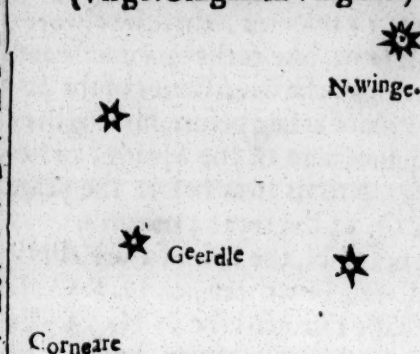


The Lyon.

The *Lyon* hath foure beautifull stars, fit for use, and sheweth it self with other, as is here set forth the first and foremost of them is called *Regulus* or *Basiliscus* otherwise the hart of the lion which commeth 3 houres & 30 min. after the great Dogge into the south, his declination

13 graden 40 minut. in the north side of the line; the second called the necke of the lion 3 hours 30 minut. after the great Dogge into the south; and hath his declination of the line 21 gr. 4 min. the back of the *Lyon* comes into the south, 74 min. before the great Dogge: his declination is in the north side of the line 22 grad. 33 min. the taile of the *Lyon* comes 5 houres after the great Dogge into the south; his declination 16 graden 36 minutes, in the north side of the line. [Benda leonis.]

(Virgo. Cingulum Virginis.)



Virgo or the maide.

After followeth *Virgo*, whereof the principall and clearest shews this shappe, as they are here portrayed; the Girdle of the *Virgin* comes into the south, sixe hours 12 minutes after the great Dogge, here declination is 5 graden 15 minutes in the north side off the line.

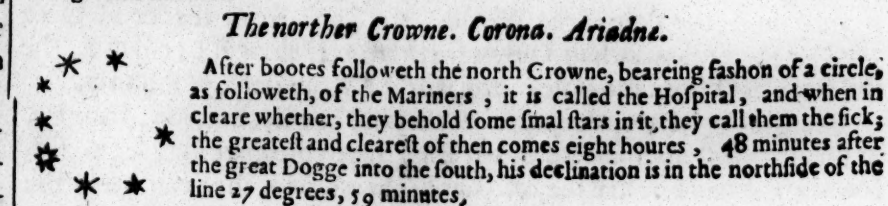
That which is an wing cal'd *Vindemiatrix* comes into the south, 9 hours, 16 min. after the great Dogge, here declination is in the north side of the line 13 degr. 57 min.

Spica Virginis.

The eare of corne or *spica Virginis* commeth 6 houres and 30 minut. after the great Dogge into the south her declination is 9 gr. 12 minutes in the south side of the line.

Bootes the Crowne. Arcturus.

Seven houres 30 minutes after the star called *Syrius*, the clearest Star of *bootes* comes into the south and standeth between his thigges, in this forme, with some other stars, and is called *Arcturus*, his declination is in the north side of the line 21 degrees 8 minutes.



The norther Crowne. Corona. Ariadne.

After bootes followeth the north Crowne, beareing fashion of a circle, as followeth, of the Mariners, it is called the Hospiral, and when in cleare whether, they behold some final stars in it, they call them the sick; the greatest and clearest of then comes eight houres, 48 minutes after the great Dogge into the south, his declination is in the northside of the line 27 degrees, 59 minutes.

The Weights Libra.

The Ballance or Waights, followe the signe of *Virgo*, as followeth.



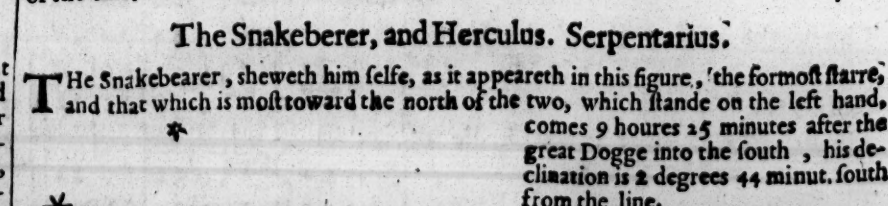
The south ballance comes eight houres after the great Dogge to the south, its declination is in the southside of the line 14 degr. 28 minutes.

The north ballance comes 8 houres, 48 minutes after *Syrius* to the south, the declination thereof is 7 degrees, 58 minutes in the southside of the line.

The Scorpion. Scorpis.

Cor *Scorpis*. *Antarus*.

Then followeth the *Scorpion*, as this figure sheweth, the hart of *Scorpis*, *Antares* communel called, comes 9 houres, 48 minutes, after *Syrius* into the south, his declination is 25 degrees 32 minutes in the south side of the line.



The Snakebearer, and Hercules. Serpentarius.

The Snakebearer, sheweth him selfe, as it appeareth in this figure, the foremost starre, and that which is most toward the north of the two, which stande on the left hand, comes 9 houres 15 minutes after the great Dogge into the south, his declination is 2 degrees 44 minut. south from the line.

The head of the Snakebearer comes 10 houres 40 minutes after *Syrius* to the south his declination 12 degrees, 53 minutes in the northside of the line.

The head of *Hercules* standeth by the head of *Serpentarius*, and comes 20 minutes before it into the south, and hath his declination northward 14 degrees, 51 minutes.



Lyon

A breefe Instruction off the Art off Navigation.

Lyra. Vultur Cadent.

Then follows Lyra in this manner, the greatest with two little ones by it, which the mariners call the three castles the highest and clearest starre, comes 11 houres, 55 minutes after the great Dogge into the south, the declination thereof is 38 degrees, 28 minutes in the north side of the line.

The Eagle. Vultur volans Aquila Sygnus.

Sheweth himself as this figure declareth, the clearest of these, that is to say the middlemost of the three, comes 13 houres after the great Dogge; or 11 houres, into the south the declination thereof is 7 degrees, 57 minutes, in the north side of the line.

The Swanne.

The Swanne is shaped thus; the starre that is the most north in the brest; cometh 13 houres, 40 minutes after or of 10 houres, 20 minutes into the south before the great Dogge, and hath his declination in the north side of the line 39 degrees, 7 minutes; That which stands most to the south of the two in the brest, is a new starre, and hath shewed it self first in the year 1600, the north wing comes 10 houres, 4 minutes after the Dogge into the south, the northern declination thereof is 44 degrees, 13 minutes.

Cauda Sygni.

The S. weing comes 14 houres after the great Dogge into the south, the declination off it is 32 graden and thirty minutes in the north side of the line. The lightest and clearest of the Swanne, which is placed in the rayle of it, comes 14 houres, after the great Dogge, or 10 houres before into the south, the declination of it is 44 degr. 1 minute in the north side of the line.



Capritorne.

The most southerly and clearest of the two lightest is the houre of Capricorne, as is here to be seen, cometh 13 houres, 30 minutes after the great Dogge into the south.

The Flying Horse Pegasus.

The Flying Horse Pegasus, we may see in the heavens in this proportion, the starre in the mouth comes 14 houres 56 minutes after, or 9 houres, 4 minutes before the great Dogge into the south, his declination is 8 degrees 7 minutes.



That which standeth on the right hippe or right legge called the Scheat, the same comes 16 houres, 16 minutes after the great Dogge, or 8 hour 44 minutes before it into the south, the declination of it is 26 degrees, 7 minutes in the north side of the line, at the same tyme comes the first and foremost in to the south; placed in the Wing, which is called Marcab. The declination of it is 13 degr. 16 minut. on the north side of the line.

The Head of Andromeda.

The head of Andromeda makingh with some starres of Pegasus a great quadrangle (whereby it is easily knowne) comes after the great Dogge into the south 17 houres, 14 minutes or 6 houres, 33 minutes before it, the declination is 27 degrees, 6 minutes north from the line.

The Image of Andromeda is placed in the Heavens in this sort: that staire that it is in the Girdle cometh before the great Dogge into the south 5 hours 40 minutes, hath his declination in the north side of the line 33 degr. 43 minutes, that which is in the most southerly foot comes 4 hours, 48 minutes before the great Dogge into the south, the declination of it 40 degrees 33 minutes in the north side of the line.

Fomahant.

The Starre named Fomahant is placed a good space

in the south side of the Flying horse, in the uttermost part of the fludde running from Aquarius, it is a great and cleare starre, and come 16 houres, 6 minutes after Syrius or 7

houres 44 minutes before it into the south; the declination there is 31 degrees, 28 minutes in the south side of the line.

Cetus or the Whalefish.

After these follows the Whalefish, it hath two notable starres in the tayle of it, the more northerly comes before the great dogge into the south 6 houres 28 minutes, the declination of it is 10 degrees, 30 minutes in the south side of the line, 14 min. after comes the fourthermost into the south, and it is in the south side of the 10 degrees line, 1 minute.

Menkar.

The clearest in the mouth named Menkar, shewes it selfe with two other starres in this order, the declination is in the north side of the line 2 degrees, 37 minutes.

Aries.

In the head of Aries there is a cleare starre appearing with that in the Horne, in form as is here described, and comes four houres, 43 minutes into the south, before the great dogge standeth in the north side of the line 21 degrees, 43 minutes.

Caput Medusæ.

Somewhat more northerly followeth the head of Medusa as it is here deciphered the clearest of these comes before the great Dogge into the south 3 houres, 46 min. and is placed in the north side of the line 39 deg. 24 minut.

Perseus.

Directly north followes Perseus a bright starre, in forme thus, and it comes before Syrius into the south, 3 houres & a half, hath the declination in the north side of the line 48 degrees, 29 minutes.

Then followes the image of the Bul, in whose head there are some starres in the forme of a bee-hive, lying a side the greatest brightest, and most easterly starr, called the eye of the bul, Aldebaran, or Ocululus Tauri, comes 2 houres 14 min. before the great Dogge into the south his declination is in the north side of the line 15 deg. 46 min.

Capella.

The Cochman, Erichonius. Auriga.

The figure of Auriga, or the Cochman, shewes him selfe a little after the Bull in the south, in such sort as is here deciphered, the greatest & brightest of them, called the goat, hircus: or capella, come one houre, 40 minutes before the great dogge into the south; the declination of it is 45 degrees, 34 minutes in the north side of the line.

The right Schoulder goeth 57 minutes before the great dogge toward the south; his declination is in the northward 44 degrees, 51 minutes.

Also called the north Horne of Taurus, goe one houre, 22 minutes before the great Dogge into the south; his declination is 28 degrees, 15 minutes northward.

The Gyant Orion.

About the same tyme come the Gyant Orion, being off this figure, it is easie to be known, the left Schoulder cometh before Syrius into the south 1 houre, 24 minutes the declination of it is 5 degrees, 51 minutes.

The right Schoulder cometh 58 minutes before the great dogge, and hath 7 degrees 17 minutes of northerly declination. The great and bright starre in the left foot called Regel, goeth one houre 32 minutes before the great dogge into the south; the declination of it is in the south side of the line 8 degrees 40 minutes.

The first of the three in the Girdle, which are called the three Kinges, goe one houre 16 minutes before Syrius into the south; the declination of it is 36 minutes in the south side of the line.

Four minutes after cometh the second or middlemost into the south; the declination is 1 degrees 27 minutes.

Three Kinges.

Nine minutes after the first cometh the last or third of the 3 Kinges into the south and hath his declination in the south side of the line 2 degr. 10 minutes.

These three Kinges stand allwayes and appeare a little above the great Dogge, where by they are easily knowne.

Here doe follow some starres which shewe themselves in the north, and therefore by some men are called North-starres.

Vrsamajor.

The Starres of the great Coach or Wagon, very servicable and fitte for those that sayle farre towards the south; they come in the tyme here following specified unto their highest, the hinderwheels

come into the north to theyr highest after Syrius or the great dogge 4 hour 13 minutes the most northern hath his declination from the Equinoctial 63 degrees 33 minutes and is distant from the Pole 26 degrees 17 minutes; the declination of the southermost is 58 degrees, 29 minutes, it is distant from the Pole 31 degr. 40 minut.

The southermost of the forewheels comes into the north to his highest right over the Pole 5 houres, 5 minutes after the great dogge is past the south; his declination 55 degr. 45 minut. in the north side of the line, and is distant from the Pole 34 degr. 15 minut.

The most northern in the forewheeles followeth 13 minutes after, and then cometh to his highest; the declination of it is 59 degrees, 4 minutes and it standeth above the Pole 30 degr. 56 minut.

The Horse next to Coach cometh to its highest in the north, 9 houres, 8 minutes, after the great Dogge is gone through the south; it declineth to the north 57 degr. 59 minut. is distant from the Pole 32 degr. 1 minute.

The middlemost horse comes halfe an houre after it to the highest; the declination off it is 56 degr. 52 minut, therefore it standeth distant from the Pole 33 degr. 8 min.

The uttermost Horse of the Coach cometh to the highest 7 houres, 4 minutes after Syrius is past through the south, the declination of it is 51 degr. 11 minutes it is distant from the Pole 21 degrees 49 minutes.

The middlemost and brightest of the waiters declined to the north 75 degr. 43 minutes is distant from the Pole 14 degr. 17 minutes.

NOTA

N O T A

Caput Draconis.

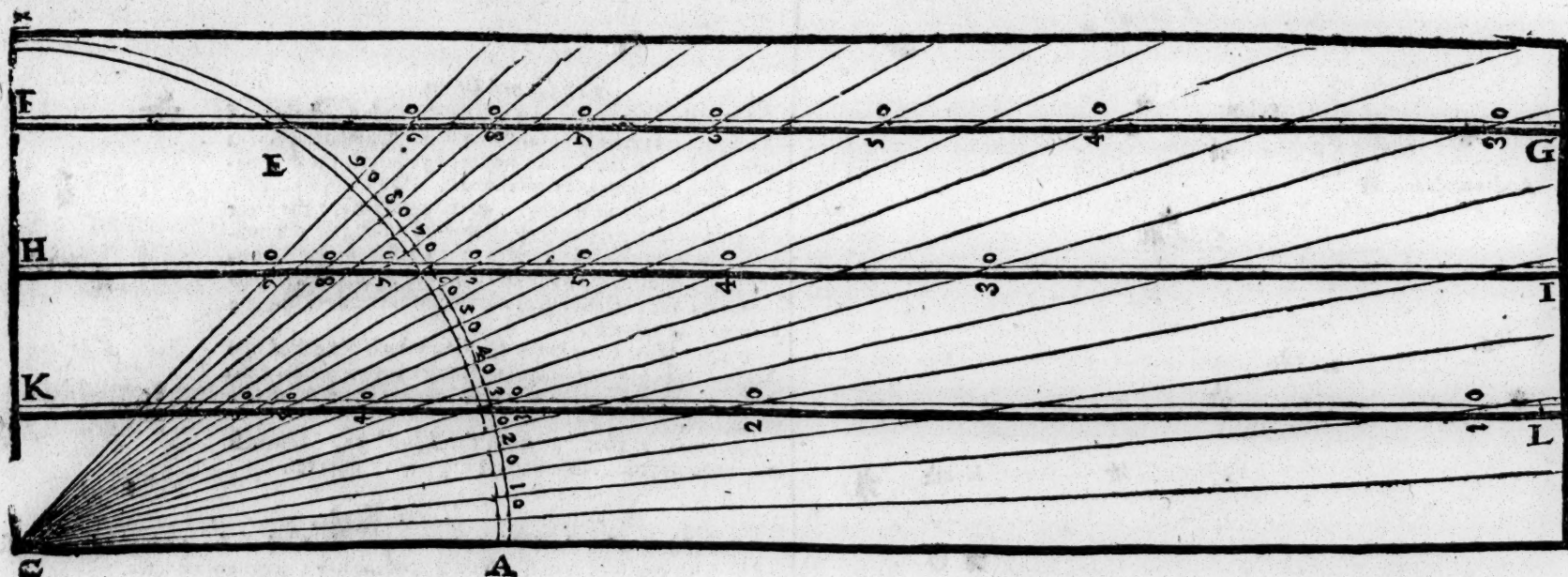
Cassiopea.

Schedir.

Of the making of the Degree bowes and Astrolabium.

It is not every mans doing to marke and make an Astrolabium, not with standing it is necessary, that a Pilote, (which must use the same) knowes if they be wel made: For to trye those things take first measure with a passer if the degrees are wel devided Secondly (hanging the same on a litle stick or corde) try with a thinne leadline, if the line going from above downward through the Centrum, hangeth also right in the lead, and if the same is as well turned as the Wyfer over the one as over the other side. Thirdly, when the Wyfer with the point standeth in the height, if them both the holes (where the Sunne must shine through) stand under and above just even farre over both sides of a like degrees,

Take afterwards with the passer even the halfe length of the Crosse, after which you make the sticke, put the same from point C to B, as is portrayed in F, and from D to G, draw such two points with a line unto each other even in such parts as such a line is cutt and devided through the foresaid lines, comming out of the Centrum of the quadrant, even also mult your sticke be marked. If the crosses be long or short, men follow the same manner, as may be seene on the lines H L and K L, which are drawne for Crosses, whose halfe part is so long as C H, or C K. So that if the foresaid quadrant, by want of good handling, is not wel devided, or the lines not wel drawne, the stickes, there-after marked, shall also be wantable. The same can be marked with more certainty after a like devided points in manner as followeth: Prepare your selfe a stike, patched with strong paper (it would be better to be beaten with brasse) draw there upon a right line, so long as your stick, take with a sharp passer the half length of the Crosse, after which you desire to make your tokening, putt the same so many times along the foresaid line as thereupon may stand, devide each of these lengths of the halfe Crosse in 10000 a like parts. Afterwards, putt upon the sticke which you will marke, from the eye-end of, even the halfe length of the Crosse, and make there a smal thwart stroke of from thence, put for every degree so many of the same parts as the halfe length of the Crosse is devided in, as in the Table here under for every degree is marked.



Degree-bows Table.

de.	parts	de	parts	de	parts	de	parts	de	parts.
1	176	19	4019	37	10057	55	21716	73	56912
2	355	20	4281	38	10503	56	22708	74	61154
3	538	21	4510	39	10965	57	23759	75	65958
4	724	22	4826	40	11445	58	24874	76	71445
5	913	23	5168	41	11943	59	26059	77	77769
6	1106	24	5399	42	12460	60	27321	78	85144
7	1303	25	5697	43	12998	61	28667	79	93884
8	1504	26	6003	44	13554	62	30108	80	104301
9	1708	27	6318	45	14142	63	31653	81	117062
10	1918	28	6643	46	14751	64	33315	82	133007
11	2131	29	6976	47	15386	65	35107	83	153499
12	2349	30	7320	48	16051	66	37046	84	180813
13	2572	31	7675	49	16746	67	39152	85	219038
14	2799	32	8040	50	17475	68	41445	86	276362
15	3032	33	8418	51	18239	69	43955	87	271885
16	3270	34	8807	52	19042	70	46713	88	561810
17	3514	35	9210	53	19887	71	49758	89	135891
18	3764	36	9626	54	20777	72	53137	90	infin.

Example.

If you can not divide the halfe length of the crosse in 1000, divide then the whole crosse also, and take there against for every degree halfe so many points as the Table sheweth. If you cannot doe that yet, divide the halfe crosse in 1000, that is an o lesser, leave against that the last let-

ters of the numbre of the parts in the Table behinde, as by Example for the 15 degree, in stead of 3032, take 303, for the 57 degr. 1376. If your Croffe be so litle, that you can not deuide it more then in 100, in such an occasion, leave off from the parts in the Table 2 letters behinde, it wil content your desire.

Of the height of the Poles above the Horizon.

The height of the Pole is alwayes even on the breadth of the Lands

Explication.

By the height of the Polus, that by many is called the height of the Lands, is to be understood the uprising of the Pole above the Horizon, that is, how many degrees there be betwixt the Horizon and the Polus. In the right Spha lyeth the Polus without any height in the Horizon. In the Spha parallela is the same from the Horizon sett up upon the highest 90 degrees. In the Obliqua or slooping Spha is the rising up distant from 1, 10, 20, 40, 50, degrees more or lesse. Any man being upon the Earth, right under the Equinoctiall line, hath both Poles, the one in the north, the other in the south on the Horizon, without any uprising, he standeth then also right under the mid-line of the Earth, without any breadth. If he turns off from the middle-line to the north, or south, the one Polus shall rise up out of the Horizon, and the other goeth under, turns he from the midle-line of the Earth 10, 20, or more degrees in breath to the north, the norther pole shall also rise up 10, 20, or more degrees, the souther Pole to the contrary, goeth so much down under the Horizon, and the Equinoctiaell line turns even so much southward from the Zenith, the contrary is when men turns off from the

A brcefe Inſtruction off the art off Navigation.

the middle-line to the ſouth. This ſheweth al plainly by theſe following figures.

Example.

Bring both the Poles on the Horizon, without any up-riſing, the Equinoctial line comes then right on the Zenith, and the little man ſhall ſtand upon the Globe of the Earth, right upon the middle line of the Earth, without any breath. If you doe move the little man upon the Globe of the Earth from the middleline to the N. 10 degr. the Equinoctial turneth then 10 degr. ſouthward from the Zenith, the norther Polus riſeth 10 degr. above the Horizon, & the S pol goeth downe 10 degrees there under.

From the height of the Equinoctiall.

The full filling of the height of the Equinoctiall is alwayes on the Poles height and breadth of the Lands.

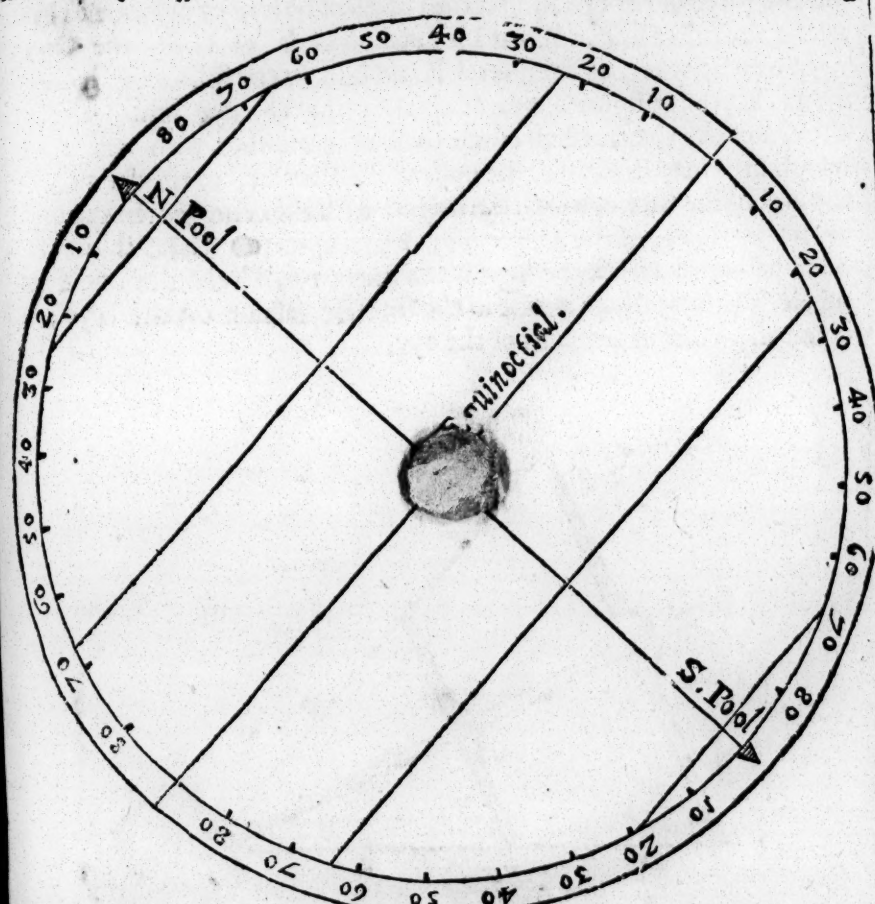
Explication.

Out of the former is ſheweth, that ſo much one of both Poles of the Horizon riſeth the Equinoctiall line turneth ſo much off from the Zenith to the Horizon. The ſpace betwixt the Equinoctiall and the Zenith, (that is the fulfilling of the height of the Equinoctiall into 90) is eve to the contrary on the height of the Polus the ſpace betwixt the Zenith & the Polus (that is the fulling of the Poles height unto 90) is alſo alwayes even on the Equinoctiall. Out of which followeth: If a man knowes upon any place of the Earth, the riſing or height of the Pole above the Horizon, or the height of the Equinoctiall, & ſo following the fullfilling of the height: he takes there alſo the breath of ſuch a place, that is, how far men is from the middle-line upon the Earth, being to the N. or to the S.

Beaue the Poles and Equinoctiall line are viſible, & therefore it is not poſſible to meaſure their height by her ſelfe: men muſt throug other things, that he can ſee, come to knowledge, to wit, through the height of the Sun & of the Starres. Before we goe, forth, we wil deſcribe the making & uſing of the ſome Inſtruments which of neceſſity belong therunto.

Explication.

The Horizon may be marked upon two manner: to wit, the true and Seeingly Horizon. The true Horizon goeth right water paſſe alwayes from our eye ſight, or through the Centrum of the Sphera, deviding



the ſame in two even alike parts, is all over from the Zenith diſtant 90 degrees; the right fourth part off an Circle.

The Seeingly is the uttermoſt of the part of the Earth or waters, which we can ſee with our eyes, and ſtretcheth not further from us then 3 or 4 duth miles. When our eye is next unto the flat of the waters, the true and Seeingly Horizon are then one without difference, but our eye being in the height from thence, the eye ſight falleth (over the roundneſſe of the Earth) all over lower then waterpaſſe, & therefore is the Seeingly Horizon lower then the true.

Example.

The Eye ſight being in the height from the Flatneſſe of the waters 14 feet in the firſt column, there beſides ſtand 4 minutes, ſo much is the Seeingly Horizon lower then the True, the Eye ſight being 140 feet in the height, then it is the Seeingly Horizon 13 minutes lower then the True.

Of the Meridiaens:

The Meridian is a great Circle, going through both the Poles of the

The eye being high above the water, footes.	The ſeeing ly Horizon is lower then the true, minutes.
2	1
4	2
8	3
14	4
20	5
27	6
37	7
39	8
53	9
67	10
82	11
100	12
140	13
163	14
186	15

World, through the Zenith, over both ſides, Croſſewiſe through the Equinoctial, and right in the ſouth and north through the Horizon.

Explication

The Meridian or middayes-Circle hath his name from *Meridies*, that is midday, becauſe that the Sunne comming in the ſouth on this Circle, makes midday. All heavenly Lights going up, and comming on this circle, are ſet upon the higheſt of the Horizon, going there through, begin again to fall ſoftly downe. If a man doth travel or ſaile right northward or ſouthward, he ſtaves alwayes under one and the ſame Meridian, but if a man turnes eaſtward or weſtward, he gets commonly alwayes another Meridian.

Of the portraiture of the Earth after the length and breadth.

The places upon the Earth are devided and contend after the length and breadth. The length of ſome places is a part of the Equinoctiall Line, (or ſome other parrallel) ſet forth betwixt two Meridians, where of the one goeth through the beginning of the length (over the Canaries Ilandt or Inſule Acores) and the other through the place it ſelfe.

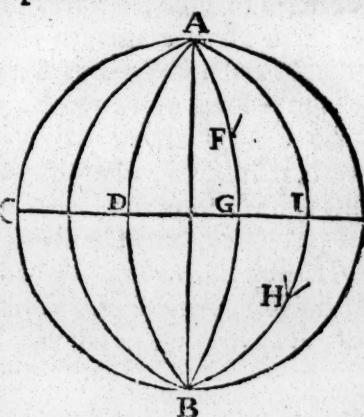
The breadth is a part of the Meridian betwixt the Equinoctiall line and the place, the ſame is devided in two parts, northerly & ſoutherly.

Explication.

Upon the Earth (by Example of the heavenly Sphera) are alſo remembered two Poles, with one middle line, to wit, two points upon the Earth, right under the Poles of the World, common with the Aſſe off the World, and a line in the miſt betwixt the ſame two points, right under the Equinoctial Line of the heavens. Along this middle line men doth count the length of the lands from W. to E. beginning, on Meridian or S. and north line, going over the Pike of Teneriffe one of the Canaries Iland till unto 360 degrees. The breadth men doe count from the middle line northward and ſouthward after both Poles, til 90 degr. This may be underſtood more plainly through theſe 2 following Examples.

I. Example.

Being in theſe following figure of the Earth A the norther, B the ſouther Pole, CDE the middle line, ADB the Meridiaen, going out of both the poles, over the Pike of Teneriffe, as the beginning of this length, F the Cape Sint Vincent in Spaine, there over muſt be brought the Meridian AFG the part of the Equinoctiall DG (betwixt theſe two Meridians) is the length of the Cape S. Vincent 23 degrees, 40 minutes, and the bow GF the parts of the Meridian, betwixt the Line and the foreſaid Cape is the northermoſt breadth 37 degrees, becauſe the foreſaid Cape lieth ſo farre from the middle-line to the north.



II. Example.

H being the Cape de bona Eſperance, the ſouthermoſt point of Africa, & there is drawn over the Meridian AIHB, the part of the Equinoctial DI is the length of the foreſaid Cape, & HI the part of the Meridian betwixt the line and the Cape, the ſouthermoſt breadth 34 degrees, becauſe the ſame Cape lieth ſo much from the line to the S. Alſo of other lauds & places.

From the difference of the common flat Sea-mappes, with the round of the Earth.

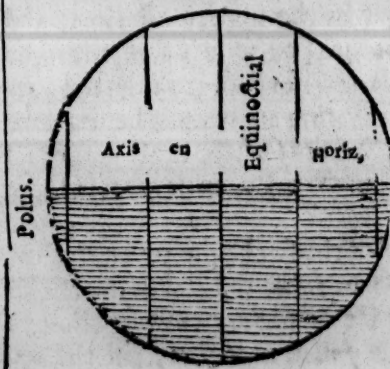
In the common Sea mappes are the Sea coaſts and corners of the Lands marked after her courſes & diſtances from the one to the other, alſo after her breadth: but becauſe of the unevereffe which they have through her flat forme, with the roundneſſe of the Earth it is not poſſible to put the ſame alſo there beſides after her right length. All Meridians or lines from ſouth and north upon the Earth how farre the ſame upon the middle line ſtand one from another, ſtretching northward or ſouthward, comes at the end of 90 degrees from the line upon a point together, but upon the flatt Sea Cardes though the ſame Meridians ſtand cloſe or far one from another, they touch each-other never, but ſtand alwayes even farre one from another. Alſo with all courſes, except only that from eaſt and weſt.

Of the ſaſhion of the Sphera.

The Sphera is noted after 3 manner: 1 In Sphera Recta. 2 Parallela, and thirdly, Obliqua, that is Right Even-wide, and ſlooping Sphera.

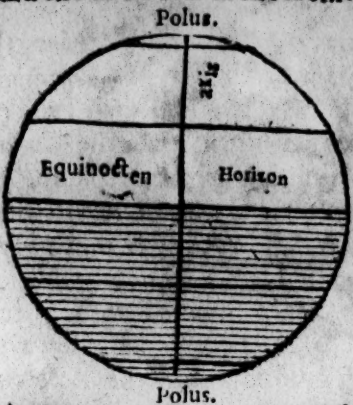
Explication.

1. Sphera Recta, or right Sphera, is ſo called, becauſe that when the Poles of the World lye on the Horizon, and the Equinoctiall common with the Zenith, in manner as this Figure: All Heavenly Lights (as the Sunne, Moone, or Starres, or the ſame which ſtand cloſe by or farre from the Equinoctiall or the Pole) doe riſe right

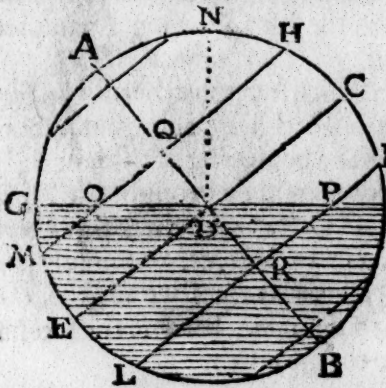


right up from the Horizon, and goe also right downward there under
Al Starres, comming up together goe also together, (through the Meri-
dian) under. And because al circles, which the Sunne, Moone, or Starres
(through the dayly turning) doe describe, are devided from the Horizon
in 2 even alike parts, the foresaid lights are also even 12 houres above,
and 12 houres under the Horizon; Day & night are upon such places al-
wayes, without changing, even long. So it goes with those that dwell
right under the Equinoctiall Line, without any breath, as in S. Thome,
in some Moluques and the like lands, where none of both Poles are in
height above the Horizon.

2, *Sphera Parallela*, or the Sphere of evenwideneſſe, is alſo called, becauſe that when the Aſſe of the World ſtandeth right in the hieght, and the one Polus in the Zenith, the Equinoctiall lyeth then common with the Horizon, ſo as this figure doth ſhew. At the place upon the Globe of the Earth, where ſuch an ſituation of the Sphere is, are al the ſtarres of the Firmament (through the dayly moving) carried round Parallel, or even wide with the Horizon. All thoſe which are above the Horizon, ſtay continually there above, without going under all thoſe which are there under, ſtay alſo continually there under, without going up. Out of which followeth (becauſe the half one part of the Equinoſial ſtayes above the Horizon, and the other halfe part there under) that the Sunne being in the part of the Ecliptica that ſtandeth above the Horizon goeth alſo not under, but maketh a day of fix moneths: To the contrary, being in the part of the Horizon, comes not up, and maketh alſo a night of fix moneths,



3. *Sphæra obliqua*, or sloping Sphæra, is so called, because the Axis of the World, nor the Equinoctial lay not flat downe, nor stand right upon the Horizon; but thwart crooked, through which comes that all Lights of the Heavens goe not right up from the Horizon, nor evenwile there by along, but rise sloping there above, and so againe downewards. So that some Starrer about the high Pole, alwayes stay



Example.

F D C being the Horizon; CDE the Equinoctiall, BDA the Asse of the World, not right up to the Zenith N, nor common with the Horizon FDG, but the one Polus there above in the height, as from G to A, the other going downe there under, from F unto B. Also the Equinoctiall with all parralleles, thwart upon the Horizon. Let the Sunne be on the Tropicum Cancrī H Q M at the midnight upon the lowest under the Horizon on M: because he goeth in 12 houres from midnight to midday, from M to H, he goeth the halfe part, from M to Q in 6 honres, and therefore in lesse then 6 houres from M to O on the Horizon, where he riseth, and in more then 6 houres from Q to H, the halfe day shall then be longer and the halfe night shorter then 6 houres. To the contrary, let the Sunne be on the Tropicum Capricorni at midnight on L, he shall goe from R to L in 6 houres and more then 6 houres till on P, on the Horizon there upon he goes, and therefore in lesse then 6 houres from P to K on the mid-day, so that the halfe day is shorter and the halfe night longer then 6 houres.

The use of the Astrolabium and Degree-bow.

Hold the Astrolabium with the finger by the uppermost ring, and let the Sunne shine in the uppermost eare (or little Table) till right upon the Lowermost eare, the utmost of the wisser sheweth then the outside of the height of the Sunne. In the piloting men must have a care that the Astrolabium be loose and doth drive untied, the most part of all these can be turned with the hand, the fourth part of an degree, to shew over the one or the other side.

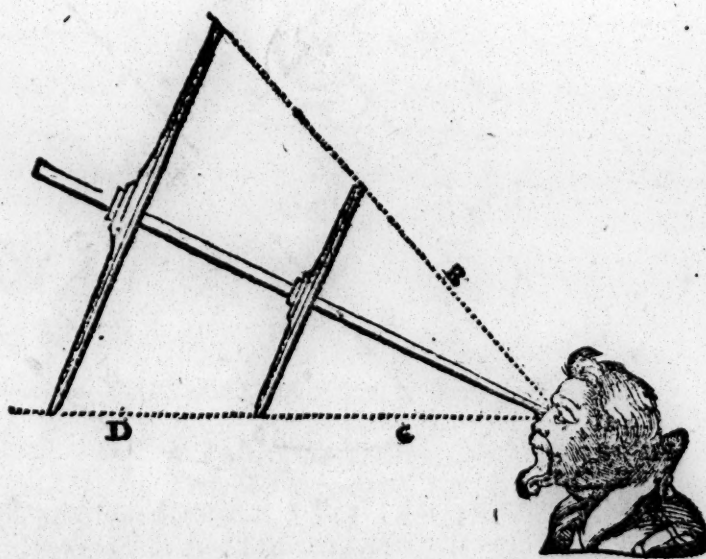
Set the Degree bow with the one end of the sticke (being on the inside or out-side of the eye) after this manner: that the end of the sticke comes right to stand next the middle-point of the moving of the eye sight, putt then the crosse so long off from you or unto you, till the up-

permost end comes upon the middelt of the Sunnie or Starres, and the lowermost even on the Horizon; The Crosse shall then on the sticke shew the degree of the height of the Sunne.

If the Sunne be farre, or close gone up from and above the Horizon that can not mislead a man in the using of the Astrolabium, but it is not so with the Degree-bow. The Sunne or Stars being risen high from the Horizon the crosse comes nearer to the eye, then if the same were but a little risen and stood close by the Horizon. Through which it makes the eye (seeing to the lowermost, then againe to the uppermost end of the Crosse) to greater moving and up-doings, when as the Sunne and the starres stand low. And because the middlemost of the eye sight, through such moving up and downe also is moved up and downe next the end of the stick: men doth see then smaller corners, then if it did staye unmoveable, without up and down-going next the end of the stick, therefore cometh the crosse nearer to the eye then it should be, and men doth finde to much height. Such is wel known by many experienced men, which therefore shortned their stick somewhat, or did butt the beginning of the degrees one degree and an halfe nearer on the eye end, but it is not the right way for to mend the foresayd failings. The best of all is (as I thinke) that a man upon every sundry height that he will make, prove, with 2 Crosse sett upon alike Degrees, how men must putt the stick in order, that men the ends of the same two Crosse may see right over another, having found that, and the one Crosse afterwards putt of, and sett the stick againe in the same fashion as before, men shal also passe al failings which might come out of the up & down-going of the eyes and can in any way be mended.

Example.

Desiring to measure the height of the Sunne, or the height of some Starres in the south I make an account how high the same shall stand, or I take the right height thereof before the same comes in the south, which I take to be 50 degrees set therefore the 2 Crosses each upon their 50 degrees, and the stick in the corner within, or in the split of the eye without the eye, and turne the head before or behinde over the one or the other side, till that I see utmost ends of both the Crosses right over another, as the lines A B and C D, in the following figure doe shew. The same figure appeareth plainly, that the eye sight strales over the end of the Crosses shall come then over another with the Lines, which men may draw over the ends of the Crosses, untill the point on the end of the stick, which doth agree with the center of the quadrant, or the beginning of the a like points whereupon the stick is marked. Such fashion of a stick be kept in the memory, I take the one Crosse off, and sett the stick againe in the foresaid fashion on the eye, and count also without any fault of the eye.



Men doth measure as well with the Degree-bow as Astrolabium two
severall things a like. The height of the Sunne or of some starres above
the Horizon, and also their fullfulling of the height, that is, how farre
the same stand from the uppermost point of the heavens above our head.

The edge of the Astrolabium is commonly marked with doppel number, the one begins from beneath up ward, with 1, 10, 20, 30 &c. Ending above next the ring with 90. The other begins above, next the Ring with 1, 10, 20, 30, downwards, ending with 90 on the lowermost tide of the halfe Circle. When as you doe make an account in the Sunne with an Astrolabium and that you doe use the first number that, sheweth, how many degrees the Sunne stands elevate above the Horizon, therefore the higher the same stands, the more number you doe get. If you doe use the other number you doe not finde the height of the Sun, but the fullfilling of the height, that is, how farre the Sunne standeth from the uppermost point of the heavens, above our head, and therefore how the Sunne stands higher, how lesser number (contrary to the other) you doe become.

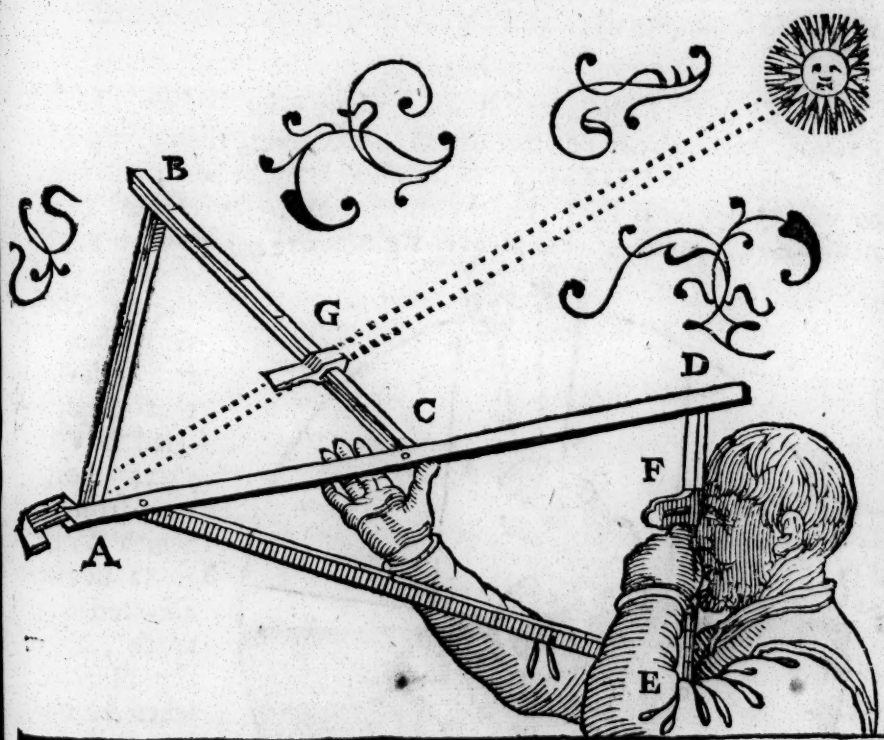
The Degree-bow is also marked with 2 several numbers, the one hath after

after the eye-end 90 and is to the utmost end counted lesse, as from 90 till, 80, 70, 60, &c. The other begins by the eye-end, and waxeth, to the contrary, after the utmost end, as from 1 to 10, 20, 30 &c. When as you measure the Sunne or any starres with the Degree-Bow, and that you doe use the first number, you finde then, how higher the same standeth above the Horizon, how higher the Sunne and Starre stand, how a men then gett the Crosse Closer to the eye. If you doe use the other number, you finde not how high any heavens light is, that men doth measure above the Horizon, but how further that standeth from the Zenith the lower the lights stand & the Crosses comes further from the eye, and the number is more.

Although men in the measuring with the Degree-bow to the Sunne (for the strengthening of the eyes) used redde or little blew glasses nor with standing is it trouble some and an hinderance for the eye-sight, especially when the same goeth high; Men can then easily finde the height of the Sunne out of his Zedaw, through suchlike turning. Degree-bow or double Three corner, as here following is portrayed, whereof the one ABC contains 60 and the other, ADE 30 degrees: putting the litle turning thng of G upon a certaine number of Degrees, after the disirng of the height of the Sunne, and seeing through the Visire F, on the lowermost end of H the Horison, men doth move F so long up and downe, till that the shadow of G comes to fall upon the litle Table A, betwixt the two Lines, the number of the degrees putt then betwixt GC, and DF, together, it sheweth then the height of the Sunne above the Horizon, or the numbers betwixt EF and GB, together the distance or Sunne standing off from the Zenith.

Example.

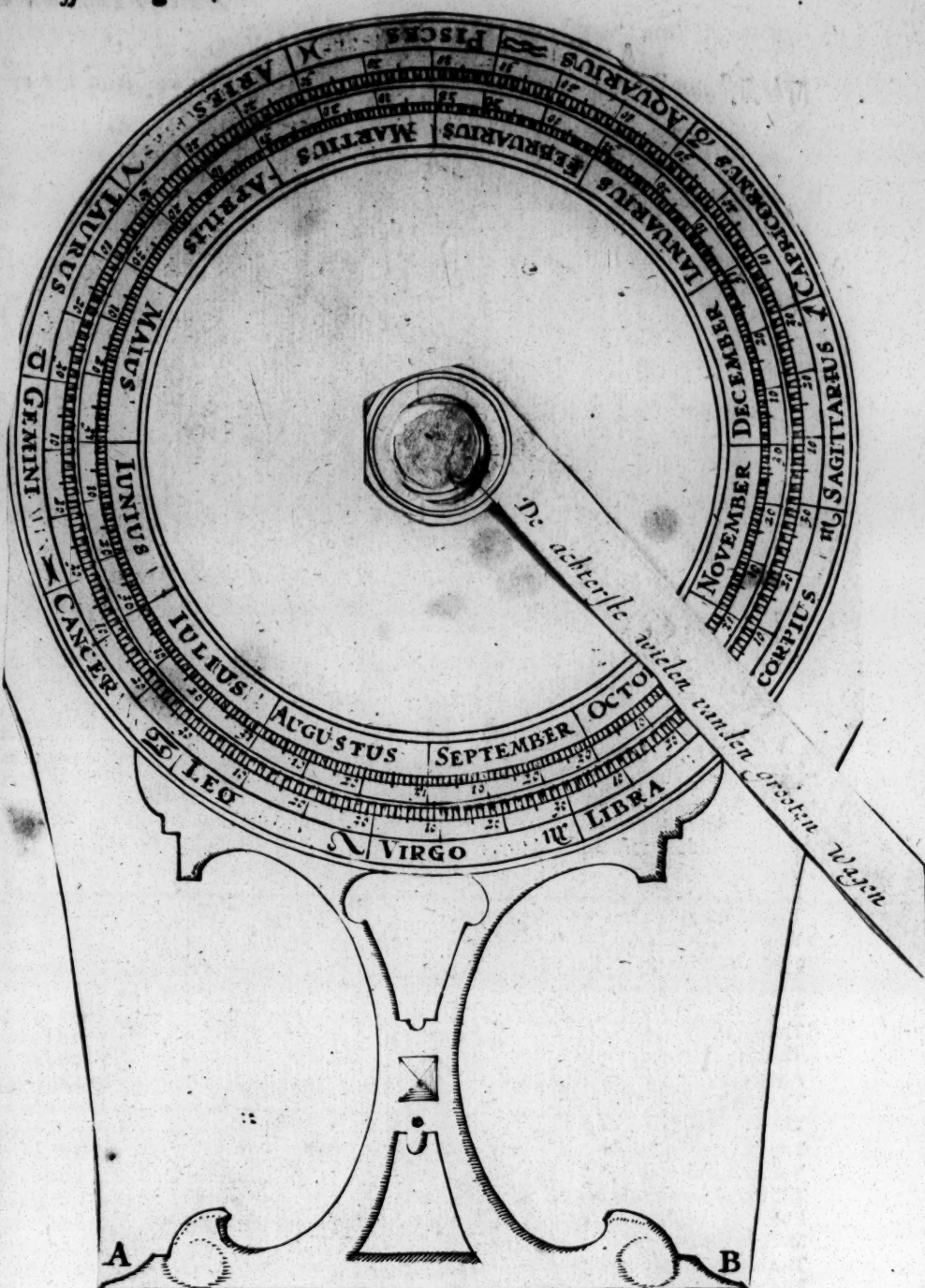
I putt the litle moving thing of G upon 20 degrees, from C to B, seeing through the Visire F, drawing it up and downe, till that together the shadow of G falls betwixt the two Lines upon the white little Table A, and the lower most side of the foresaid litle table right upon the Horison, I finde so betwixt D and F 16 degrees, the same by the 20 of



GC, makes together 36 degrees for the height of the Sunne above the Horizon, or the 40 from G to B, and 14 from F to E, together 45, gives the fullfilling of the height, or the distance of the Sun from the Zenith.

For to finde the houre of the day and of the night.

For to find the houre by day upon all heights, is the best and surest way, through such an Equinoctiall-Compasse, as is portrayed in the water-tydes. In the night you may find the same through an night-wifer as the following figure, the same hath two round shives, the one is unmoveable, the other moveable, upon the lowermost unmoveable stand the 12 Signes of the heavens, next the moneths and dayes of the year, upon the moveable, the houres, the same doth turne with another wifer (whose one right sideresponds right upon the middle-point) beyond a nayle with an hole or pipe, through which you may see. The using of the night-wifers is thus: Men set first the teeth, next the twelfth houre on the moveable shive, on the day of the yeare, upon the lowermost unmoveable shive, and hold the Instrument in the height, with the lowermost edge of the foot A B right waterpasse, so that men through the hole of the. Nayle may see the Northstarre, turning then the wifer upward and downward, so long till that the hinder someft wheele of the great Wagon comes on the Wifer, that being so, the Wifer shall then shew, on the moveable shive, the right houre. If men in stead of the hinder someft Wheelles of the great Wagon doth use the clearest of the Watchmen it shall be 4 houres and 15 minutes later then



the wifer shall shew, because the foresaid Wheelles of the great Wagon goeth so many tymes before.

Men can also finde the houres out of the right Ascension of the Sunne and Starres, thus: When you see some Starres in the south, whole right Ascension is knowne, and men knowes also the right Ascension of the Sunne upon the same day. drawing the Suns Ascension from the Ascension of the Starres, that which then remaineth must be dealt through 15 (for 15 degrees makes an houre) which doe shew the right houre of the same time. If the Ascension be more then the Ascension of the Starre, in such a way shal men adde 360 degrees by the Ascension of the starre and goe then forth in such a way as before is described.

I. Example.

Upon the tenth of April, in the evening I see in the south the Hart of the Lyon, whose right Ascension is 174 degrees. The Sunnes right Ascension upon the same day is 19 degrees, take the same off from the Ascension of the Starre, there remaines 128 degrees, the same divided through 15 I find 8 houres and 8 remaining degrees, and when 15 degrees make an houre, then makes every degree 4 minutes, the remaining 8 degrees make also 23 minuts of an houre, it shall then upon that time 8 a clocke, 32 minuts, to reckon off from the midday,

I.I. Example.

Upon the fifth of November in the night I finde in the south the Starre Aldebaran the souther-eye of the Bul, whose right Ascension is 64 degrees, the Suns right Ascension upon that day 220 degrees, which is more then these of Aldebaran, therefore I put unto the Ascension of the Starre 360 degrees, is together 424 degrees, drawing there out the Sunnes right Ascension 220, there remaines 204 degrees for the difference of the time betwixt the Sunne and the foresaid Starres, the which divided through 15, comes 13 houres, and also 9 remaining degrees, these make 36 minutes, it is then 13 houres and 36 minutes from the midday, that is, one houre 36 minutes after midnight.

For to find the Ascension upon every day of the Yeare, as well of the Sunne as of the Starres, we have put here unto two little Tables, the one of the Sunne, shewing from 5 till 5 dayes the Sunnes Ascension, out of which the same for other dayes there betwixt easily may be found. The other for 30 of the principal Starres, both only by degrees, because this will serve very well to that end.

A breefe Instruction off the art off Navigation.

A table of the right ascension of the Sunne.
The first number in the table sheweth the day of the moneth, the second the degrees of the ascension of the Sunne on that day.

Janua.	Februa.	Martius	April.	Majus.	Iunius
da	gra.	da	gra.	da	gra.
5	287	5	319	5	246
10	292	10	324	10	351
15	297	15	329	15	355
20	303	20	334	20	360
25	308	25	339	25	365
31	314	31	342	31	368
10	109	10	140	10	195
15	114	15	145	15	200
20	119	20	149	20	205
25	124	25	154	25	209
31	130	31	159	31	215
10	109	10	140	10	195
15	114	15	145	15	200
20	119	20	149	20	205
25	124	25	154	25	209
31	130	31	159	31	215

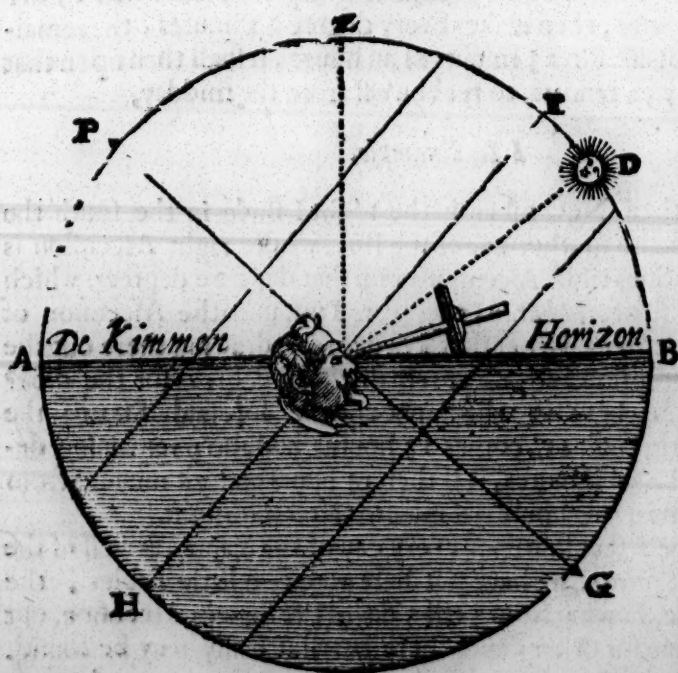
A Table of the right ascension of the primeft stars.

The Girdle of Andromeda	12 degrees
The clearest in the head of the Ram	27 degrees
Menkar the brightest in the mouth of the Whales	41 degrees
Aldebaran, the south eye of the bull	64 degrees
Capella in the left shoulder of Erichonius	72 degrees
Regel the left foot of Orion	74 degrees
The star in the left shoulder of Orion	84 degrees
Syrius the great Dogge	97 degrees
The north head of Gemini	180 degrees
The south head of Gemini	111 degrees
Procyon the little Dogge	110 degrees
The brightest in the watersnake, Cor Hydra	137 degrees
Regulus the Hart of the Lyon	147 degrees
The tayle of the Lyon	172 degrees
Vindemiatrix the right wing of Virgo	191 degrees
Spica Virginis the care of corne	196 degrees
Arcturus the brightest in Bootes	210 degrees
The south Waight	214 degrees
The north waight	210 degrees
The brightest in the north Crowne	230 degrees
Antars the Hart of the Schorpion	242 degrees
The Head of Hercules	254 degrees
The head of Serpentarius	259 degrees
The tayle of the Eagle	282 degrees
Vultur the clearest in the Eagle	293 degrees
The star in the mouth of the horse Pegasus	311 degrees
Fomahant the brightest in the end of Aquarius	339 degrees
Marcab the shaft or foot of Pegasus	342 degrees
The uttermost in the wing of Pegasus	348 degrees
The most northerly in the Whales tayle	360 degrees

How to finde the height of the Pole by the Sunne.

To finde the height of the Pole by the Sunne, one thing is specially to be marked, to wit, wheter you are northward or southward from the Sunne, whether the Sunne standeth northward or southward from you is easily knowne, when you are in such a place upon the earth as is far from the line, or from the Sun but when the Sun is neare almost above your head, then you can not wel see it with your eye, therefore set a compasse before you that you, may see where n. and S. is, then take your Astralobium, & set it so that the one edge thereof stand right south and the other north, and then you shall see at a hayres breadth, whether the Sunne being at the height, standeth northward or southward from the head point or Zenith: if then you wil seeke the height of the Pole, when you are on the north side of the Sunne, that is, when the Sunne is southward from you, then take the just height first, and as much as the declination of the Sunne is northward, take it out of your height, & that which resteth is the height of the Equinoctial in the south, which subtracted out of 90 (as here before is declared) then you have the height of the north Pole.

Example.

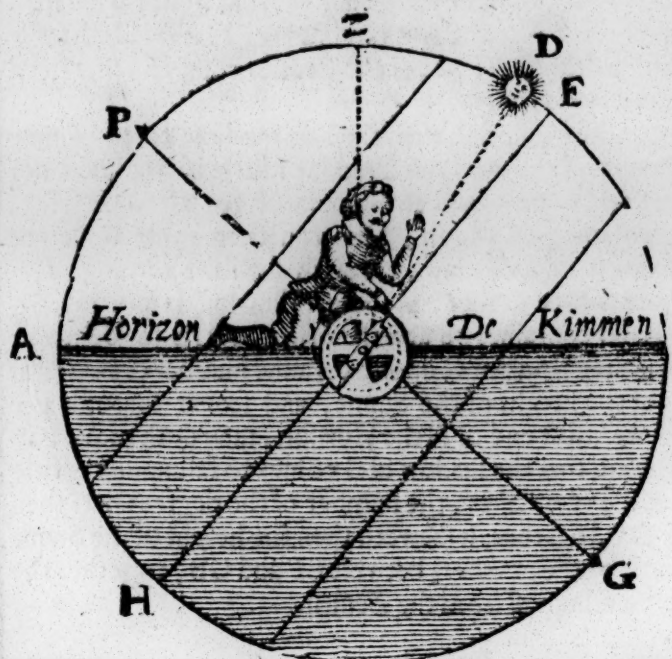


of the Sun, there will rest BE 52 degrees, which is the height of the Equinoctial, which taken out of 90 degrees, resteth 38 degrees, for the

height of the north Pole A P, as here before is sheweth.

If the declination be southerly, then adde into the height aforesayd taken: and then if the addition be lesse then 90, then looke upon the height of the Line in the south, which taken out of 90, as aforesayd, it leaveth you the height of the north Pole.

Examples.



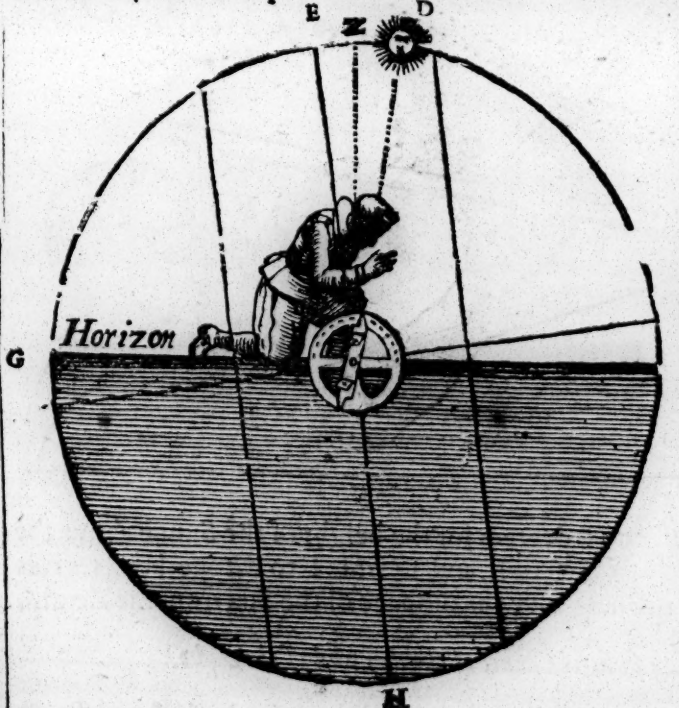
Let the height off the Sunne D B 40 degr. the southerly declination of the Sun then adde ED 20 degr. to D B 40 degr. it maketh EB 60 degrees, the height of the Equinoctial, which subtracted from 20, as EG the di-

stance between the Equinoctial and the S. Pole, then there will rest 30 for GB, that is as much as the S. Pole is gone under the Horizon as before is shewed, so much as the one Pole is under the Horizon just so much is the other above it, the north pole P shal here be elevated 30 degrees.

But if the height of the Sun being added unto the declination maketh more then 90 degr. then you must understand, that the Equinoctial is N. ward from you head just so much as the aforesaid addition is more then 90, and so consequently the S. Pole also shall be so much elevated.

Example.

Looke into the figure next following, where in let the height be DB 80 degr. and southerly declination ED 18 degrees, then if you adde ED 18 degrees to DB 80 degrees, the height of the Sun, there will be 90 degrees for BE, seeing then that from the Horizon B, to the Zenith Z (that is the point in Heaven right above our heads) is just 90



degrees as in the 12 Chapter is taught) it followeth that Equinoctial is 8 degrees northward from the zenith Z, and B so 82 degrees elevated in the north, above the Horizon: when AE is taken out of 90 there resteth 8 degrees for the height of the south Pole, G above the Horizon B, then you must un-

derstand, that you are between the Line and the Sunne.

How you shall finde the height of the Pole, when you are southward from the Sunne.

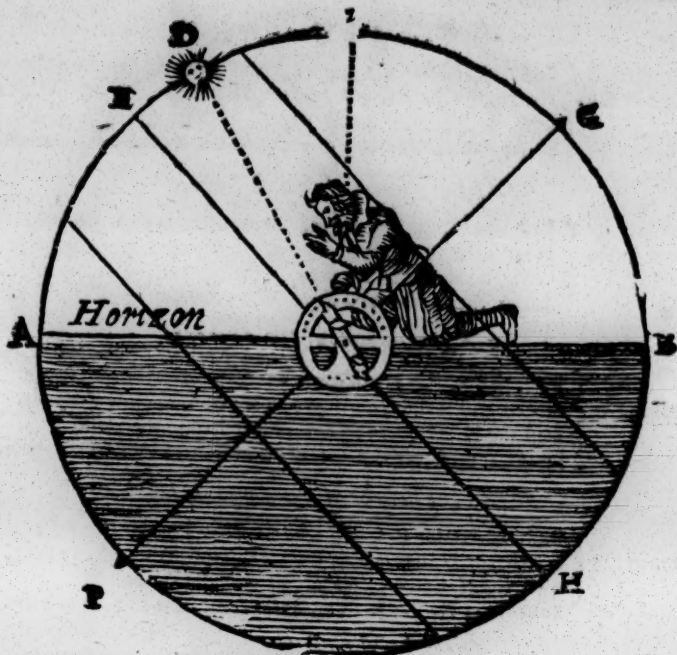
When you perceive that you are southward from the Sunne, that is, when the Sun standeth northward from you, first (as aforesaid) take the height of the Sun: then if the declination be southwards, take it out of your height which you have found, and then you shall have the height of the Equinoctial, which subtracted from 90, it sheweth under what height you are, southward from the Line.

Example.

Behold the figure above standing. Let AD be the height of the Sunne in 64 degrees: the southerly declination ED 16 degrees: which subtracted from AD the height of the Sunne, there remaineth for AE 48 degrees the height of the Equinoctial in the north, which subtracted out of 90, then the height of the south Pole GB will be 42 degr.

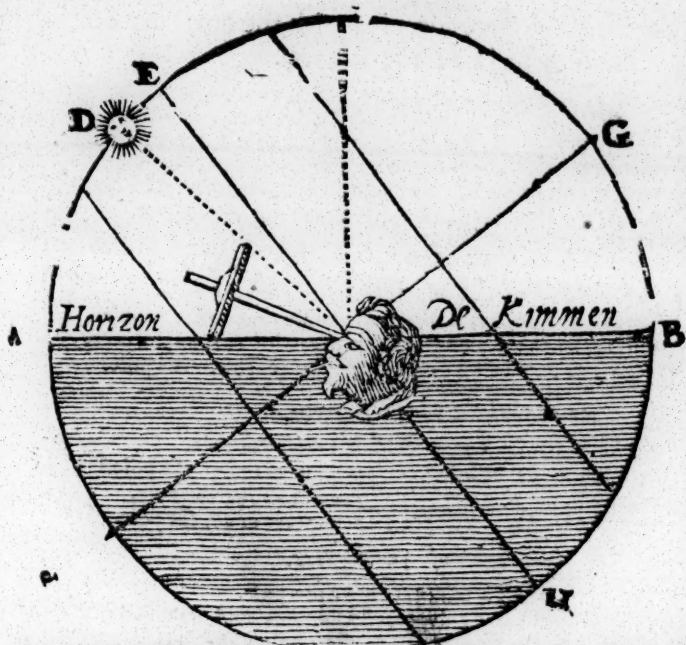
If the Declination be northerly, then adde it to the height found out, if then the addition be lesse then 19 it sheweth you the height of the

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of the Equinoctiall, which taken out 90, you finde the height of the south Pole.

Example.

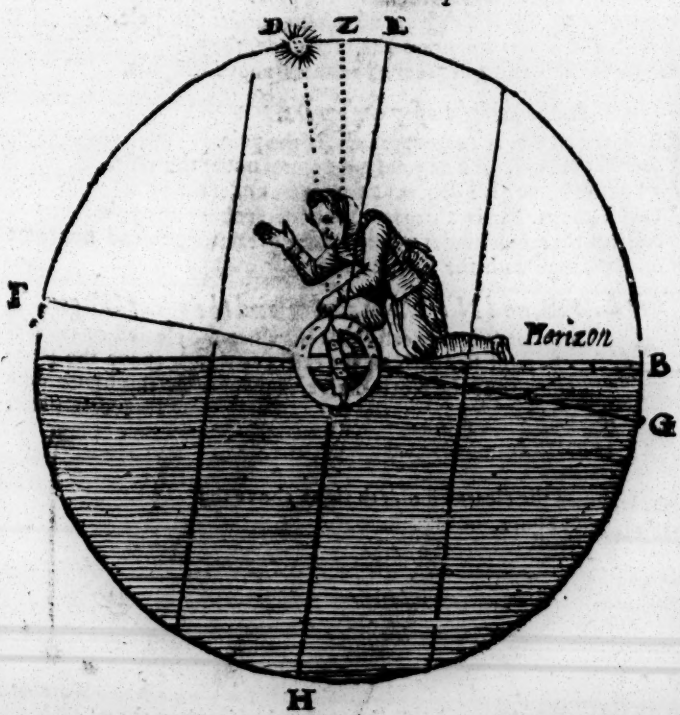


Looke on the Figure with his circles as it followeth here after, let AD the height of the Sun in the N. be 50 degrees and DE the northerly declination 15 degrees then adde ED 15 to DA 15 degrees, then you have 63 degrees for AE the height

of the Equinoctiall, then GB, the height of the south Pole is 25 degrees for as in the 16 former it is sheweth, the height of the Equinoctiall EA with the height of the Pole GB alwayes make 90 degrees.

But if the height and the declination of the Sun added together more then 90, you must note that the Line is southward from your Zenith, as much as that number is above 90.

Example.



Look on the following Figure, let the height of the Sunne AD in the north be 84 degrees, the declination ED 21 degrees adde the together, then you have AE 105 degrees, which in the distance between the Equinoctiall E & the Horizon in the North: now mark that AE is 15 or and P

the Pole and E the Equinoctiall are even 90 degrees from each other then it followeth that P from A is 15 degrees, that is the height of the n. Pole above the Horizon, and so much you must be northward from the Line, and you must also marke that you are between the and the Sun.

How you shall finde the height when you are right under the Sunne.

If you understand the rules before going well, then this is easie to be found. If you be right under the Sunne, that is when the Sun is elevated 9 degrees, then you are even as many degr. northward or southward from the line, as the Sun hath northerly or southerly declination.

The Explication thereof.

Suppose that you finde the height off the Sunne above the Horizon to be 90 degrees, and that it is declined toward the north 16 degrees

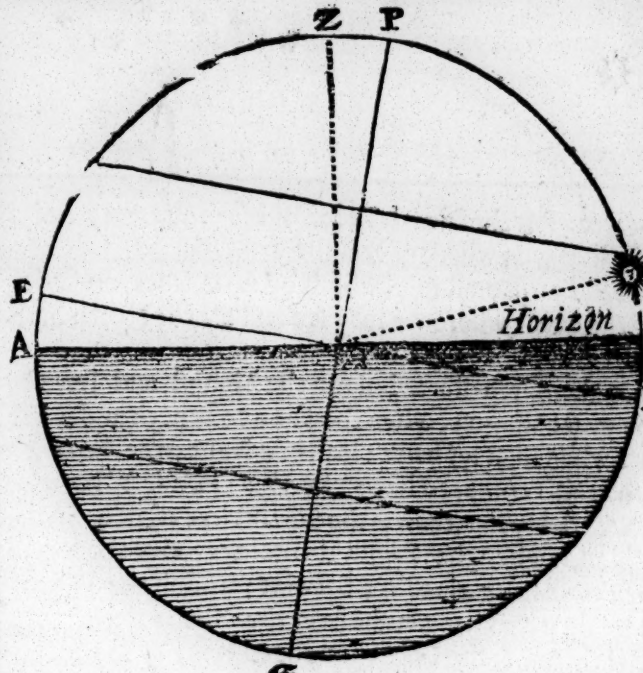
then are you also 16 degrees northward from the Line, and the north Pole shall be so much elevated.

But if the Sun hath no declination, that is, when it standeth even in the line, then you must understand, that you are also right under the line and so both the Poles are on the Horizon without any elevation.

How you shall finde the height of the Sun northward in such places where as it goeth not downe.

They that in Sommerfaile to Moscovia, in the moneths May, June and Iuly, comming about the north Cape, finde, that the Sunne at that tyme goeth not downe there, but is allwayes above the Horizon, so that a man according to the rules aforesaid, may not onely seeke the height of the Pole by the Sunne, when it is highest southward, but also when it is northward at the lowest, in this manner following Take the height of the Sunne with the crosse staffe, when it is lowest in the north, and adde there to the filling of the declination, (which is such a number as together which the declination make ninetie, or so much as the Sunne standeth from the Pole) and you shall finde the just height of the Pole: or if you subtract the height of the Sun from his declination then you shall finde how deep the Equinoctiall is de pressed northward under the Horizon, or in the south elevated above the Horizon, which subtracted from 90, will likewise leave the height of the Pole, both these wayes I will declare a part.

Example.



Mark the figure aforesaid, where let BD be the height of, the Sun about the Horizon, in the north 7 degrees HD the declination of the Sun 20 degrees; then shall DP the filling of the declination, or the distance of the Sun from the Pole be 70 degrees: now if you adde PD

the filling of the declination 70, to be BD 7, the height of the Sun, you shall finde 77 degrees for BP the height of the Pole.

Another Example.

If you take the height of the Sun AD 7, from HD 20, the declination of the Sun, there will remain 13 for HB, and so much is the Equinoctial in the north de pressed under the Horizon, which if you subtract of HP 93, there remaineth for AP 77, the height of the Pole, as above said.

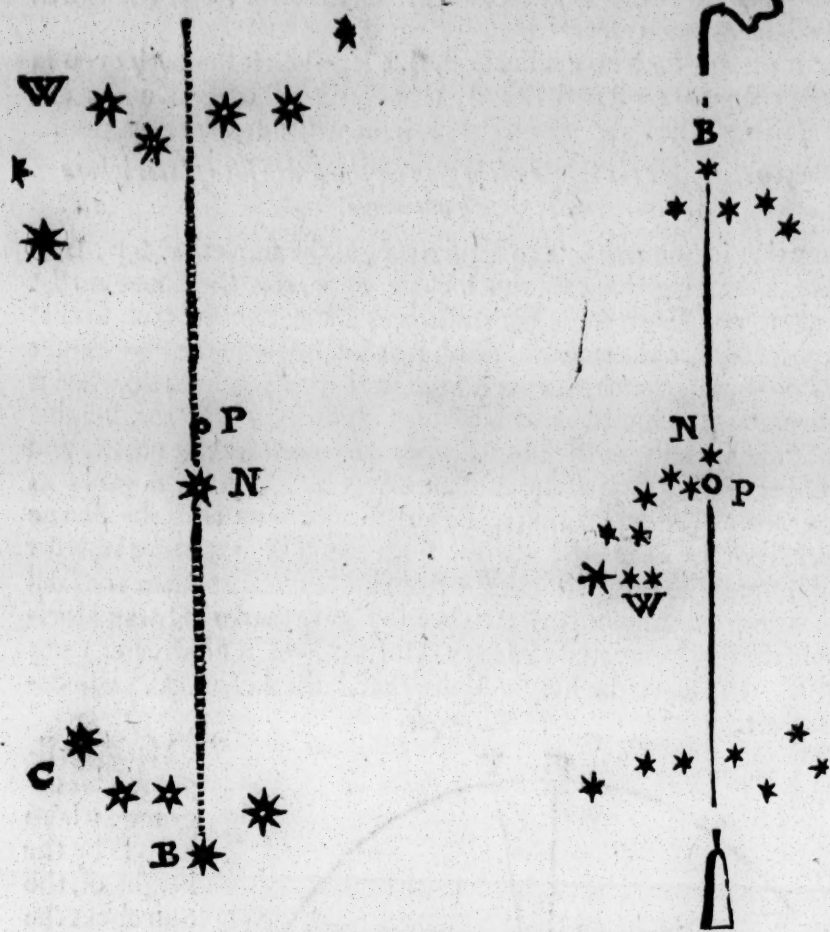
Of the north Starre, and how you shall finde the height thereby.

AL fixed Starres, as in te former writing is declared, with the time doe alter their declination some increafe, and some diminish, one more then the other, the north Star at this tyme is one of those which is most subject to changing, which in anno 1600 stood from the Pole two degrees 50 and a halfe minutes, and in the yare 1700 it will stand two degrees and 16 and a halfe minutes, so that every 3 yare it cometh a minute nearer unto the Pole in Anno 1608 it stood from the Pole two degrees, 18 minutes, and thereof we have here made our reckoning, if then you will know the height of the north Starre when it is right under the Pole, then you must adde two degrees, and 48 minutes, to the height which shall be found by the Crosse-staffe, so it bee right above the Pole (that is the highest) then you must subtract two degrees and 48 minutes, and then you shall have the right height, but to know when it is right under the Pole at the lowest, then looke when the great Wagon standeth right under the North Starre of Leyen, if you take a lead or stick also it hang in your sight right upon Leyen, and the said line or stick also hapgeth right between the Wagon and the horses, then Leyen is right above the Pole at the highest: to the contrary, when the Wagon standeth above Leyen and a Line is hanged between the Wagon and the Horses, and hangeth right over Leyen, then Leyen is right under the Pole at the lowest. This also may be marked by the Starr that standeth in the breast of Cassiopeia, for when it standeth right under Leyen, then Leyen is right under the Pole at the lowest, and when it is right above Leyen, then Leyen is at the highest above the Pole. But to know the starres that are in the breast of Cassiopeia, you must understand, that it is the second off the five highest Starres that standeth in Cassiopeia: or if you take a staffe and hold it thwart wise, with one end right between the Wagon and the Horse, and the middle part over the north-Starre, then the other end will show right upon the said Starre, which standeth in the breast of Cassiopeia, which wil easily bee understood by this figure

b 3

N is

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N is the north Starre: P is the North Pole, W is the Wagon, and C are the Starres of Cassiopeya, where of B is the breft.

This is a certaine and a generall rule, which by no meanes can fayle, and in all places off the earth (where we may see and use the North Starre) is without any alteration.

For to know when the north-starre is upon the highest and lowest, have a care upon the great Wagon, when the same commeth under the north-starre, so that when men let hang a lead line right over the north starre, that these then also comes to hang in the middest betwixt through the Wagon & the Horses, then is the northstarre right upon the highest above the Pole. Or when the Wagon also comes above the North starre, that then men doth hang a leadline betwixt through the Wagon and Horses, that these then also hang right over the North starre, then is the North-starre right under the Pole upon the lowest, as in the former figure is portrayed.

Or when the star comes in the Breft of Cassiopea, right above the North star, then is the North star above the Pole upon the highest.

When the same is right under the Northstarre then is the North-starre, upon the lowest under the Pole, so as these Figure here above doth shew.

The Starres of the Wagon are well knowne of every one. The starres in Cassiopea, there in 5 the principals, as here above is portrayed. The second of these that is, which standeth farthest distant from the North-starre, these is in the Breft, and standeth almost even farre from the North-starre, as the northernmost fore wheele of the great Wagon.

If men hold a right sticke upon the eyesight, with the one end throug betwixt the Wagon and the Horses, and the middest over the North-starre, the other end shall then stretch over the foresaid starre, which standeth in the Breft of Cassiopea.

The use of the naeth star when you take the height by the wayters which are on the northern hinderwheele of the great Wagon.

For as much as many Pilots know north the names of many of the fixed starred, and therefore follow the use of the N. star according to the points of the compasse: we have for the use of these men, made two sorts of tables the one according to the waters (which we have mended, the other according to the northern hinder wheele of the great Wagon both of them on the foure strokes north, southeast and west, and in as much as in this kinde or worke the north star hath a different standing in sundry heights of the Pole, we have calculated the tables agreeing to divers heights or latitudes from 10 degrees to 10 degrees as followeth

At the height of 10 degrees.

When the brightest of the wayters standeth in the { East, then is the N. star under the pole 1 degrees 18 minutes.
North, then it is 2 degrees 48 minutes under the pole.
West 1 degree 22 minutes above the pole.
South 2 degrees, 18 minutes above the pole.

At the height of 20 degrees.

When the brightest of the wayters standeth in the { East, the N. star is 1 degree, 31 minutes under the pole.
North, the N. star is 2 degrees 18 minutes under the pole.
West, the N. star is 1 degree, 19 minutes above the pole.
South, the N. star is 2 degrees 19 minutes above the pole.

At the height of 30 degrees.

When the brightest of the wayters standeth in the { East, the N. star is 1 degree 25 minutes above the pole.
North, the N. star is 2 degrees 18 minutes under the pole.
West, the N. star is 1 degree, 14 minutes above the pole.
South, the N. star is 2 degrees 19 minutes, higher than the pole.

At the height of 40 degrees.

The wayters in the { East, the N. star is 1 degree, 39 minutes under the pole.
North, the N. star is 2 degrees 10 minutes below the pole.
West, the N. star is 1 degree, 14 minutes above the pole.
South, the N. star is 1 degrees 19 minutes above the pole:

At the height of 50 degrees.

The wayters in the { East, the N. star is 1 degree, 44 minutes below the pole.
North, the N. star is 1 degree, 3 minutes below the pole.
West, the N. star is 1 degree, 3 minutes above the pole.
South, the N. star is 2 degrees 20 minutes above the pole.

At the height of 60 degrees.

The wayters in the { East, the N. star is 1 degree, 52 minutes under the pole.
North, the N. star is 2 degree 16 minutes below the pole.
West, the N. star is 53 minutes higher than the pole.
South, the N. star is 2 degrees 20 minutes above the pole.

At the height of 70 degrees.

The wayters in the { East, the N. star is 2 degrees 5 minutes under the pole.
South, the N. star is 2 degrees 15 minutes under the pole.
West, the N. star is 32 minutes above the pole.
South, the N. star is 2 degrees 12 minutes above the pole.

At the height of 80 degrees.

The wayters in the { East, the N. star is 2 degrees 33 minutes under the pole.
North, the N. star is 2 degrees 12 minutes under the pole:
West, the N. star is 33 minutes under the pole.
South, the N. star is 2 degrees 44 minutes, higher then the pole.

The use of the North-starre, agreeing with the northernmost hinderwheele of the Wagon.

At the height of 10 degrees.

When the northernmost wheele of the wagon standeth in the { East, then is the N. star higher then the pole 1 degree 1 minut.
North, the N. star is 2 degrees 17 minutes above the pole.
West, the N. star is 1 degree 14 minut. lower then the pole.
South, the N. star is under the Horizon out of sight.

At the height of 20 degrees.

The northern wheel of the Wagon. { East, the N. star is 54 minutes higher then the pole.
North, the N. star is 2 degrees 17 minutes under the pole.
West, the N. star is 1 degree 26 minutes lower then the pole.
South, the N. star is 2 degrees 27 minutes above the pole.

At the height of 30 degrees.

The northernmost hinder-wheele of the wagon. { East, the N. star is 47 minutes higher then the pole.
North, the N. star is 2 degrees 27 minutes under the pole:
West, the N. star is 2 degrees 26 minutes above the pole.
South, the N. star is 2 degrees 27 minutes under the pole.

At the height of 40 degrees.

The northernmost hinder wheele. { East, the N. star is 38 minutes above the pole.
North, the north star 2 degrees 27 minutes under the pole.
West, the N. star is 1 degree 34 minutes below the pole.
South, the N. star is 2 degrees 28 minutes above the pole.

At the height of 50 degrees.

The northernmost wheele. { East, the N. star is 24 minutes above the pole.
North, the N. star is 2 degrees 34 minutes under the pole.
West, the N. star is 1 degree 45 minutes under the pole.
South, the N. star is 2 degrees 28 minutes above the pole.

At the height of 60 degrees.

The northernmost hinder-wheele. { East, the N. star is 2 minutes above the pole.
North, the N. star is 2 degrees 26 minutes under the pole.
West, the N. star is 2 degrees 1 minute under the pole.
South, the N. star is 2 degrees 28 minutes above the pole.

At the height of 70 degrees.

The northern hinder wheele. { East, the N. star is 14 minutes under the pole.
South, the N. star is 2 degrees 24 minutes under the pole.
West, the N. star is 2 degrees 22 minutes under the pole.
South, the N. star is 2 degrees 29 minutes above the pole.

At the hight of 10 degrees the north hinder wheele of the great Wagon can not come from the Horizon at the same high with the North-star.

Explication, of the E. W. S. and N. of the Watches, and the great Wagon.

Northstarre. { The Watches east, that is, when the clearest or middlemost standeth to the east even high above the Horizon, so as the North-starre, in manner as this figure doth shew.
Watches.
North-starre.

The watches north, is, when the clearest standeth right above the North-starre, as in this second figure.

Watches. { The watches in the west, that is when the middlemost of the watches stands to the west from the North-starre and which the same even high above the Horizon, as in this third figure.
Watches.
North-starre.

The watches in the south that is, when the clearest of the same standeth right under the North-starre, as in this fourth Figure.

Upon this manner, as from the watches, is also to understand the East, west, South, and North from the northernmost Hinder-wheele of the great wagon, thus:

Watches
The

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The northernmost hinder-wheele in the north, that is, when the same is right above the North-starre, as this first Figure doth shew.

That same hinder-whee in the west
thas is, when it standeth westward even,
high, so as the Northstarre above the Ho-
rizon, as in this Figure.

The northermost hinder-wheele of the Wagon in the east, that is, when that doth stand eastward even high above the Horizon, as the N. starre, like this second Figure.

That same Hinder-wheele of the Wagon
in the South, that is when it standeth right
under the North-starre, as in this fourth
Figure.

The using of these foresaid Tables.

Men stayes till that men hath the clearest of the Watches, or the northermost Hinder-wheele of the great Wagon upon some of the foresaide courses, then makes men an account of the height of the North-starre above the Horizon. Out of the found height, together with the presuming, men doth almost know the height of the Pole, especially close by, for to finde out of the foresaid Tables how much the North-starre standeth higher or lower then the Pole. Is the same higher, men pulls it of is it lower, men putts that unto the measured height, and find also the right height of the Pole.

These foresaid Tables are onely counted from ten till ten degrees, and when a man is most betwixt such heights, shall men comming upon other heights take notice how many degrees he is above or under these counted pales, and with, one how great the difference is betwixt such two, as the findes himself, having taken notice hereof, men takes then the difference, after the course of the height where a man is in, lesse or more from the foresaid, taking off or putting to the same, so as it comes to passe.

I. Example.

I desire to know upon the height of 46 degrees, how much the North-
starre standeth lower then the Watches in the east, taking notice how
great the difference is betwixt the height of 40 and 50 degrees, finde 5
minutes in creasing; say therefore: 10 degrees in height give five mi-
nutes, how much then 6 degrees? Facit 3 minutes, set these by the 3
degree, 39 minutes, which I doe finde in the Table next the 40 degrees
because the difference of 40 till 50 degrees is in creasing finde also 1
degree 42 minutes.

11. Example.

Upon the height of 48 degree, I desire to know how much the North-starre standeth higher then the northermost Hinder-wheele of the Wagon in the East, the difference and Table betwixt 40 and 50 degrees height, is 40 minutes diminishing, say therefore: 10 degrees difference height, give 14 minutes; how much 8 degrees? Ecit, roome 11 minutes, drawing these from 38 minutes; standing next the 40 degrees height, because the difference from 40 til 50 degrees diminisheth, finde 27 minutes, that the Northstarre standeth to high upon the fore-said height of 48 degrees.

*Of the vapours and exhalations which the sunne, moon and Stars; as they are
nearer the Horizon do seem to draw up more, as indeed
and truth they are.*

Experience teacheth, that the lights of heaven, by how much they are nearer the Horizon, by so much doe they seeme to be higher then indeed they are; and by reason of the fumes, which continually rise and as they are nearer the Horizon, so much as they more thicker, and rising by little and little, they lesser, and at the least are clean vanished, and as we come nearer the Pole, the vapours do more & more increase, and for that cause doe the lights seeme to be higher than they are. Yea it is found about the height of 83 degrees, towards the north, that the

Sunne seemeth to be 40 minutes higher than in truth is, this hath famous Astronomer Ticho Brahe, search out and written in Denmarcke, as you may see in this table.

A table of the rising of the Sunne.			A table of the rising of the Starres.		
Degrees.		Minute.	Degrees.		Minutes.
0		34	0		33
When the	1	26	1	12	To be
Sunne	2		2	15	
if duo on	4		4	18	
behight	7		7	21	
	10	13	10	24	higher
	16	10	16	30	
	23	7	23	33	
	32	3	32	36	
		1			than in-
					deed
					they are

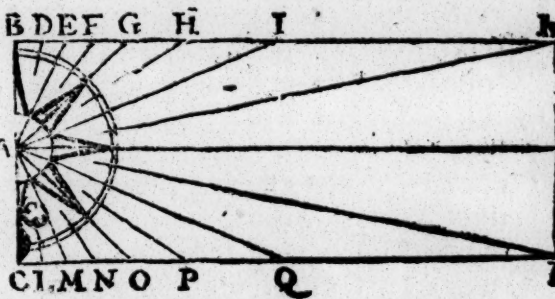
The use of this table will we declare by an example and what soever may be said of the rising of the Sun, the same may be said of the starres.

Example.

L Et the height of the sun be measured; and found to be 7 degrees above the Horizon, and in the table of the Sunne above written; there are 13 minutes which the Sun seemeth to be higher than it is, therefore substract 13 minutes from the 7 degrees; there will remaine 6 degrees 47 minutes for the true height of the Sun.

But if we take the distance of the Sun from the Zenith according to this Example, it would be found to be 83 degrees, and then the 13 minutes added to the 83 degrees the product is 83 degrees 13 minutes for the true distance of the Sun from the Zenith, then if we take 83 degrees 13 minutes from 90 degrees there will remain 6 degrees 47 minutes as before, and so will it be in all the other.

*How many miles or leagues you must saile on every point of the compasse
before you shall get a degree in breedth of the land.*



the Meridian whence you sailed, as it were from B to D _____ 3 leagues
 Northnortheast and Southsoutheast, as from A to E or M, for a degree _____ 16 leagues
 You are from the Meridian whence you sail 6 leagues as from B to E.
 Northeast and by north, and S.E. and by south you sail as from A to B or N _____ 12 leagues
 You shall bee without the same line as from B to F. _____ 10 leagues
 Northeast and southeast, you sail for a degree as from A to G or O _____ 21 leagues
 You are then of the north and south line whence you sail as it were from B to G
 or C O _____ 15 leagues
 Northeast and by east and S.E. and by east, as from A to H or to P for a degree _____ 27 leagues
 You are then out of the first Meridian, as from A to H, or C P _____ 22 leagues
 Eastnortheast or eastsoutheast, you sail for a degree as from A to I or Q 39 & a halfe leag.
 You shall bee out of the Meridian, as from B to I or from C to Q _____ 36 leagues
 East and by north or east and by south, as it were from A to K or R you sail for a de-
 gree _____ 77 leagues and a halfe.
 Then are you out of the Meridian, as from B to K, or from C to R.
 East or west, as from A to S, you remaine between the Pole and Equinoctiall on the selfe
 same breadth of the earth or land.

When you sail right
south or right N. on a
ny one point of the
compasse, as from A to B or
C, you saile for a degrees
15 leagues. And you stay
under the same Meridian.

On the point north and
by east, or south and by
east, as from A to B or E,
you saile for a degree 15
and a halfe leagues.

And then you are out of
 3 leagues
 degree — 16 leagues
 to E.
 A to B or N 12 leagues
 or O — 10 leagues
 as it were from B to G 21 leagues
 15 leagues
 P for a degree 27 leagues
 22 leagues
 I or Q 39 & a half league
 36 leagues
 R you sail for a de-
 77 leagues and a half.

Of the changin^g of the Compasses.

THe needle of the Steele neder the Compassse, whetted with the Saile stone, drawes at severall places severally, at some right to the north, at other turnes it to the east, and other-ways to the west. As per Example: By the Ilands of Corvo and Flores, (the westermost of the Flemmish Ilands.) By Helms Huy a little by west the north-Cape. About 30 leagues westward from the south corner of Spitsbergh, by east the Cape de Bona Esperance, on the Cape das-Aguilhas, and at more places as, wel in the East as in West Indies, sheweth the wetted needle right north Westward from the Flemmish Ilands by east the North-cape. On *Nova Sembla*, on the Coast of Spitsberge, and by east the Cape das Aguilhas, upon the whole Indis Sea sheweth the same from the north to the westward, and by east the Flemmish Ilands; by west the Cape de Bona Esperance, and more other places from the north eastward. The turning off from the needle is then portned in two, to witt, from the north to the west, which by the Dutchmen is called westerling or north westerling, and from the north to the east, which is called easterling or north easterling. Every one of these is also devided in two, to witt, increasing and diminishing easterling; as also, increasing and diminishing westerling. Increasing Easterling or westerling, is, when a man sailes from west to east, increasing and diminishing, which then doth diminish. The same can be more plainly understood by Examples; as followeth.

I. Examples:

If a man doth saile from the Ilands Corvo and Flores, where the needle sheweth right eastward on to the coast of Spaine, the needle be-
ginneth (and in time more and more) to turne off from the north to the
east, til a man come a litle by east the Iland S. Brandaon where the same
is upon the highest 22 degrees, of 2 whole stroakes, that is, Increasing
northwesterling. Sailing forth from thence it begins to diminish, til next
the south point of Celebes, where the needle draweth right again, that
is called diminishing northwesterling;

For

For the common Navigation from the Nether-lands upon East, North-England, til France and Spaine, are the Steeles (for to make the lilly, to shew right North) laid fast under the Roses, about 2 third parts of a stroake, from the north to the East. The courses and distances from the one land to the other, in the common Pascades of these Fare-waters, are also made after such Compasses, so that men with the same can saile there unto without altering of the Compasses, or to make any other account there-upon.

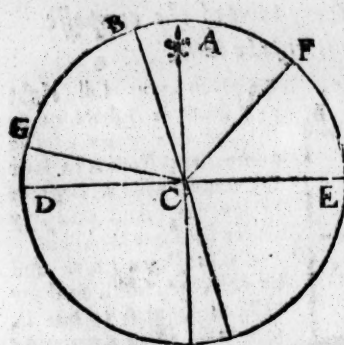
Upon farre Voyages over the great Sea, where the Needle turns a Roake, two, or more, now to the west, and then to the East, it necessary to have a good care, and marke sharply there-upon, over what side as how farre the same sheweth from the north, for to be assured what course a man (sailing) doth keepe.

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If the up-going be nearer to the north then the undergoing, the turning of then is from the north to the east, & a man hath north-eastering.

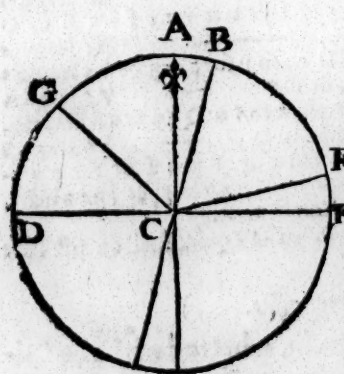
If the up-going be further from the north then the undergoing, the turning-off is then from the north to the West, and a man hath north-westering.

I. Example.



Being the up-going of the Sunne on F, from E by north the east 40, that is, from A the norther 50 degrees; the under-going on G, from D by north the west 10, that is from A the norther 80 degrees, the bow G A F, doth then 130 degrees, these deviding in two, on B, such that G B and B F every one doth 65 degrees; B is then the right North-point (in the midst betwixt the up and under-going) such a Compasse sheweth then from B to A 15 degrees to the east. Or if from the left measuring from the west D G be done 10 degrees, from the most from the east E F 40, and the remaining 30 devideth in two, comes 15 B A north-eastering.

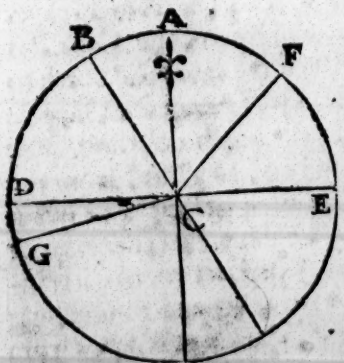
II. Example.



Let the up-going of the Sunne be on F 80 degrees, from the north to the east, the under-going on G 60 degrees to the west, the bow G A F doth then 140 degrees, these devideth in two on B, such that G B and B F, every one doth 70 degrees, B is then the right north point, 10 degrees by east the Lilly, the Lilly or Needle sheweth then 10 degrees from the right north to the west. Or if a man from the left measuring drawes 10, from the most of the west 30, and devideth the remaining 20 in two, there comes to even on AB, the northwestering of the Needle.

If the up-going falls by north the east and the under-going by south the west, a man doth even upon the same fashion to the south, as in the former examples to the north is declared.

III. Example.



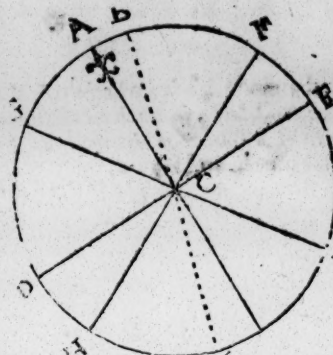
Taking F to be the up-going from E the east distant 40, and from A north 50 degrees, G the under-going, from D the west to the south 16 or from the north A 106 degrees, the Bow G D A F is then 156 degrees, these deviding on two, as before on B, such that G B and B F every one doth 78 degrees, B shal be the right northpoint 28 degrees by west the Needle, the same sheweth then 28 degrees from the north to the east. Or if a man the left measuring by south the west 16, addeth with the most measuring by north the east 40, and doth divide such number in two, there comes 28 even on the north-eastering of the Needle.

Out of the former Examples is enough to be understood all other things, which in the measuring of the up and under-going of the Sunne a man might meete.

When it happeneth that a man can not see the Sunne in the up and under-going, through the thickeffe of the Clouds, hee may then measure the same in the fore and after-noon upon one selfe-same height, and doe as before.

VI. Example.

Four or five houres in the fore noone the nearer the up-going the beter I take with a degree bow or Astrolabium the height of the Sunne above the Horison 10 degrees and measure also the Sunne with a shewing Instrument over the compasse, or with and hanging thred, and finde the shadow of the tred on G, 40 degrees from the north to the west, such that I C G must be taken for the shadow, I note that per memore, and staye till after noone that the Sunne is gone downe againe upon the same height as before of 10 degrees, and I looke then where the shadow of such hanging thred doth shew, the which is as I take it on F 60



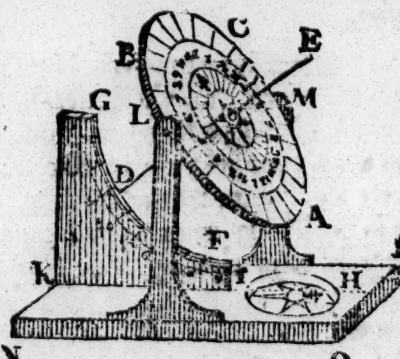
degr. from A north, such that HCE portrays the shadow. The bow G A F 100 degrees, divided in two alike parts on B, so that G B and B F every one doth 50 degrees, the point B is the right north point, the needle then turneth from the north of B unto A, to the west, 10 degrees, and also in all other occasions.

After such a manner may a man in the forenoone measure, two three, foure, or more, as by Example: The first, when the Sunne is high, five, the second, eight, or ten the third, twelve, fifteen or more, and in the afternoone againe upon the like heights, then a man doth finde how the one a greeth with to other, and when a man alwayes findes a selfesame north point, he is then so much more assured off his perfect measuring. This is hereby to be noted: how a man doth such measuring further from the midday and nearer on the upgoing and under going of the Sunne, the more certaine it is, and the more thereu-pon may be trusted, by reason, because the Sunne coming close by the midday, doth but change little in height, not withstanding turneth a great deale upon the Compasse.

Of the Tydes.

It is knowne al experienced Mariners that the ebbing and flowing of the sea is governed by the Moone; also that at every new and full Moone the waters are higher, which they call spring-tydes, and at the quarter of the Moon the waters are lowest: so that you may know and that certainly by former observation, (although the turne and real cause thereof is yet hidded from us) the houre of the tyde, and on what point or stroke the Moone maketh high water in any particular place, to the great profit and furtherance of navigation.

To know on what stroke the Moone is, it may be done in a two fold manner, by the sight or by marking how old the Moone is; to looke at some stroke of the Compasse, may not be done according to the common Compasse lying flatte or driving water Compasse, because that Horizon divideth only into equall strokes, and sheweth in what virtical Circle or Azimuth the Sun or Moone standeth, but by a Compasse that (being lifted up) according to the Superficial part of the Equinoctiall, devideth the Equinoctiall into equall parts, as the common flatte driving doth the Horizon, such an Equinoctiall compasse is made in this manner as you see in this figure: where the roundell



ABC sheweth the flatte of the Equinoctiall, the gnomon E D the axeltre of the World. The fore-said roundell in B marked on both sides, in the inside with the Compasse, and on the edge of the outside, with twice 24 hour, and in the east and west at Land M hanging on two pinnes as it were on an axeltre, so that these being turned up and downe, and the gnomon set & the nether end by D and by the Quadrant F D

G, that you may place in at the height of any pole. If you set such a compasse with the bottom water compasse, the line HK just north and south, to wit H to the north and K to the south, and the lower end of the gnomon by such a degree of the Quadrant F C, according to the height of the Pole where you are: there will the roundell A B C, stand even with the surface of the turne Equinoctiall, and the gnomon E D with the axeltre of the World.

The sight one such a Compasse, and a common one, differeth very much, and by how much nearer the Equinoctiall so much more will the difference be, as will appear by this Example following.

1 Example.

On the height of 50 gr. or thereabouts, the Sunne being in the beginning of the Cancer in the greatest northerly declination it is a common Compasse east at halfe and houre past seven, and west at halfe an houre past foure, that is he goeth from the east to the west through the south in nine houer, but from the west through the north to the east in 15 houres.

2 Example.

At the height of 30 degrees, he comes lit'e before halfe an houre past nine at the east, and a little after halfe an houre past two to the west, and so is

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it goeth in lesse then 5 houres and a halfe from the east through the
outh into the West, but from the West through the North to the East
goeth more then 11 houres.

3. Example.

The Dragonhead being in the beginning of Aries, and the Moone in the beginning of Cancer, they make 5 degr. more Declination than the Sun, & go to the foresayd height of 30 degrees more then an houre sooner from the east to the west, then the Sun, to wit, about the space of 4 hures, & againe from the west to the east about the space of 2 hures.

Under the line, the Sun having no Declination, riseth in the morning
the east, and rising remaineth east untill he commeth to the Zenith,
and passeth that to the West, and abideth so descending West, till he ap-
proacheth the Horizon and is accordingh to a flatte driving Compasse,
the one halfe of the Day east, and the other west, without comming to
any other stroke, but it is not so on such an Equinoctiall Compasse. The
Sunne and Moone both going alwayes in the same distance of time over
every stroke, to wit, from the east to the south in 6 houres, and from the
south to the west in 6 houres, and againe from the W. through the N. in
the space of six houres.

Example.

Under the line, the Sun being in the Equinoctiall, I set the end of the gnomon E directly north, the other end D to the south at the upper edge of the Quadrant at G on O, the gnomon E D shall lye Water-compassse, like the axeltree of the world, and the roundell right in the lead upright like the true Equinoctiall there. The Sun comming above the Horizon, the shadow of the gnomon shall direct you to the sixth houre in the east, for the rising, but if hee rise beyond the edge off the roundell, and deuideth that in the same time into equal parts with the shadow, being 45 graden above the Horizon, the shadow of the gnomon shall direct you to the 9 houre in the south, being come into the Zenith, the shadow shall fall just on the lead at the twelue houre in the south,

again 45 graden, that is descending halfe way the west, the shadow shall be at the 3 houre in the afternone in the southwest, but comming to the Horizon the shadow shall fall on the 6 houre in the West.

As this is spoken of the Sun, the same must be understood of the moon in as concerneth the points or strokes of the **Compass**.

To reckon by the age of the Moone , we have set in the table following under every stroke two rankes of ciphers, the first are the dayes of the age of the moone , or the dayes past since the moone was new or at the full. The second the houres and minutes off those dayes , in the which the moone comes to such a stroke , and maketh at the place standing by high water.

Example.

Eight dayes after the moon hath bene new or the full, I desire to know when the moone commeth to the south, or at Embden, Enckhuysen, and such like places, makes high water (for there a north and a south moone makes full Sea) I seek under the north and south stroke the 8 day in the 1 columnne, and by that in the second 6 houres 24 minutes on that then shall the moone come to the north and south at 6 houres 24 minut. and make high water in that place.

The tyde 48 minutes later every day, that is foure or five parts of an houre, then if you know at what houre the new or full moone make high water in any one place, you shall reckon from that first day every day 4 or 5 parts off an houre later, and so you shall find the just time of high water or full sea in that place.

Example.

When the moone is new or full, then it is at Amsterdam and Rotterdam (and whereſoeuer a ſouthweſt and northeaſt moone maketh full ſea) high water at three of the clocke, a day after the new or full moone at three of the clocke 24 minutes, two dayes after at foure of the clocke and 36 minutes, and foure dayes after the new or full moon at ſix of the clocke 12 minutes.

Here follow the Table of the Water tydes.

West and by North, and East and by South.			Westnorthwest, and Eastsoutheast.			Northwest by west, and Southeast by East.			
ho	mi		da	ho	mi	da	ho	mi	
12	0	At the Inttish islands	0	1	30	Under the Holy land	0	12	45
12	48	Before the Hever, Eyder, and	1	2	18	Before the mase and Goeree,	1	1	33
1	36	Flye. Before Emden and Delfe-	2	3	6	Before the Veere,	2	2	21
2	24	ziel. Before Knckhuysen, Horn	3	3	54	at Armewe. Vpon the flat be-	3	3	9
3	12	and Orck, upon all the coasts	4	4	42	fore Rammekens, Before the	4	3	57
4	0	off Flanders, upon the fore-	5	5	30	Wielinghs. On the Sealand	5	4	45
4	48	land. At Doeuer in the Bier.	6	6	18	coasts. Before the Thames off	6	5	33
5	36	at Bevesier on the sand, at	7	7	6	London	7	6	21
6	24	Hanson on the Kay. Before	8	7	54	Before Yarmouth	8	7	9
7	12	Schietenburgh and the Ras off	9	8	42	In Duyns on the Road	9	7	57
8	0	Blanckert,	10	9	30	Near the Cingle	10	8	45
8	48	at Olfernes.	11	0	18	On the wester of VVight	11	9	33
9	36	in the Conduit	12	11	6	without Callice and Swarte-	12	10	21
10	24	at Iubleter in the Road.	13	11	54	nes. In Blaver	13	11	9
11	12		14	12	42	Bulline at the land.	14	11	57
12	0		15	13	30		15	12	45

Northwest, and Southwest			Northwest by north, and Southeast by South.			Northnorthwest, and Southsoutheast			
ho	mi		da	ho	mi	da	ho	mi	
2	15	Without Fontenay	0	3	0	At Amsterdam, Rotterdam,	0	12	45
3	3	Without Blaver	1	3	48	Dort and Ziericksea, before	1	1	33
3	51	Vnder Bulline	2	4	36	Newcastle, the These, & Harie	2	2	21
4	39	before the VVieling	3	5	24	poole. In Roobinhoods bay,	3	3	9
5	27	before the mase.	4	6	12	without the Flemis banckes.	4	3	57
6	15		5	7	0	In the pas off Callice, before	5	4	45
7	3		6	7	48	Conquet, at peymarques groy	6	5	33
7	51		7	8	36	Armentiers, his Kiliaets,	7	6	21
8	39		8	9	24	porthus, the River of Burdeux	8	7	9
9	27		9	0	12	On al the southcoasts off Bri-	9	7	57
10	15		10	11	0	tagne, Gascoigne, Poicta, On	10	8	45
11	3		11	11	48	al coasts off Biscaye, Galiffien	11	9	33
11	51		12	12	46	Portugale and Spanie, On the	12	10	21
12	39		13	1	24	west coasts off Yreland, at Bo-	13	11	9
1	27		14	2	12	kenes or Orkenesse, in Hitland	14	11	57
2	15		15	3	0	and Fairhill.	15	12	45

Westsouthwest, and Eastnortheast			West by South, and east by north,			VVest and East			
ho	mi		da	ho	mi	da	ho	mi	
4	30	From Texel to the pas off Ca-	0	1	15	In Torbay and Dartmouth,	0	6	0
5	18	lice in the fareway, before	1	6	3	in Flynnmouth and Fawycke,	1	6	48
6	6	Humber, before Flambrough	2	6	51	in the Sea of Galles	2	7	36
6	54	and Seherenborough Abruac.	3	7	39	in Famouth,	3	8	24
7	42	In Famouth, in the Mouscho-	4	8	27	in Milford,	4	9	12
8	30	le, Seven islands, S. Pauls with-	5	9	15	At Ramsey in wales.	5	10	0
9	18	out the haven betweene garn-	6	10	3	before Lin in Engeland	6	10	48
10	6	sey and the seven Isles in the	7	10	51	against London,	7	11	36
10	54	fairewater. In the Breefand,	8	11	39	In all havens on the south coast	8	12	24
11	42	without the Fourc. All South	9	12	27	of Irelandt.	9	1	12
12	30	coasts off Yreland, as Kinfael,	10	1	15		10	2	0
1	18	Corcke Iochel, waterford, and	11	2	3		11	2	48
2	6	Cape de Clare.	12	2	31		12	3	36
2	54		13	3	29		13	4	24
3	42		14	4	37		14	5	12
4	30		15	5	15		15	6	0

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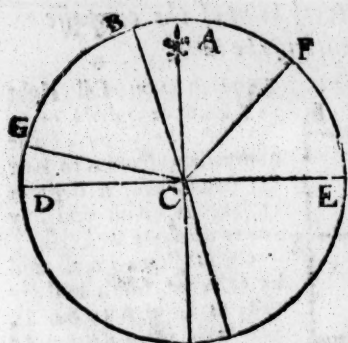
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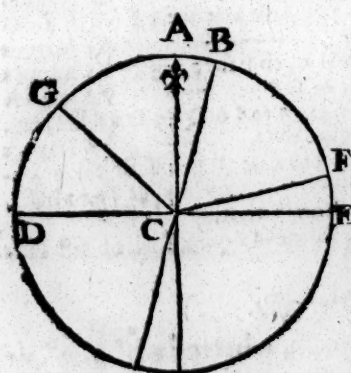
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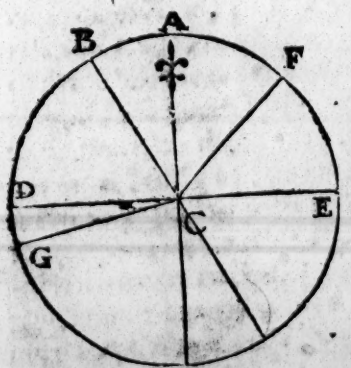
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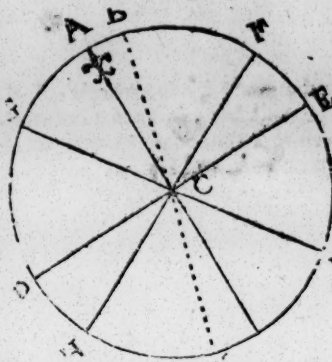
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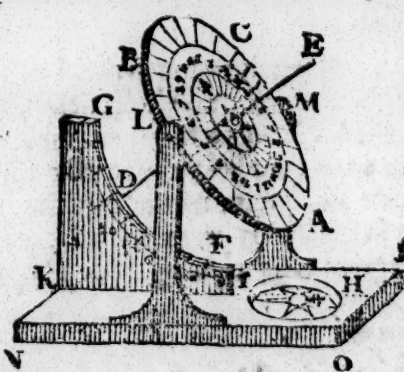


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so it goeth in lesse then 3 houres and a halfe from the east through the South into the West, but from the West through the North to the East he goeth more then 11 houres.

3. Example.

The Dragonshead being in the beginning of Aries, and the Moone in the beginning of Cancer, they make 5 degr. more Declination than the Sun, & go to the foresayd height of 30 degrees more then an houre sooner from the east to the west, then the Sun, to wit, about the space of 4 houres, & againe from the west to the east about the space of 2 houres.

Under the line, the Sun having no Declination, riseth in the morning in the east, and rising remaineth east untill he commeth to the Zenith, and passeth that to the West, and abideth so descending West, till he approacheth the Horizon and is accordingh to a flatte driving Compasse, the one halfe of the Day east, and the other west, without comming no any other stroke, but it is not so on such an Equinoctiall Compasse. The Sunne and Moone both going alwayes in the same distance of time over every stroke, to wit, from the east to the south in 6 houres, and from the south to the west in 6 houres, and againe from the W. through the N. in twice six houres.

Example.

Under the line, the Sun being in the Equinoctiall, I set the end off the gnomon E directly north, the other end D to the south at the upper edge of the Quadrant at G on O, the gnomon E D shall lye Water Compasse, like the axeltree of the world, and the roundell right in the lead upright like the true Equinoctiall there. The Sun comming above the Horizon, the shadow of the gnomon shall direct you to the sixt houre in the east, for the rising, but if hee rise beyond the edge off the roundell, and devideth that in the same time into equall parts with the shadow, being 45 graden above the Horizon, the shadow of the gnomon will direct you to the 9 houre in the south, being come into the Zenith, the shadow shall fall just on the lead at the twelwe houre in the south,

again 45 graden, that is descending halfe way the west, the shadow shall be at the 3 houre in the afternone in the southwest, but comming to the Horizon the shadow shall fall on the 6 houre in the West.

As this is spoken of the Sun, the same must be understood of the moon in as concerneth the points or strokes of the Compasse.

To reckon by the age of the Moone, we have set in the table following under every stroke two rankes of ciphers, the first are the dayes of the age of the moone, or the dayes past since the moone was new or at the full. The second the houres and minutes off those dayes, in the which the moone comes to such a stroke, and maketh at the place standing by high water.

Example.

Eight dayes after the moon hath beene new or the full, I desire to know when the moone commeth to the south, or at Embden, Enckhuysen, and such like places, makes high water (for there a north and a south moone makes full Sea) I seek under the north and south stroke the 8 day in the 1 columnne, and by that in the second 6 houres 24 minutes on that then shall the moone come to the north and south at 6 houres 24 minut. and make high water in that place.

The tyde 48 minutes later every day, that is foure or five parts of an houre, then if you know at what houre the new or full moone make high water in any one place, you shall reckon from that first day every day 4 or 5 parts off an houre later, and so you shall find the just time of high water or full sea in that place.

Example.

When the moone is new or full, then it is at Amsterdam and Rotterdam (and wheresoever a southwest and northeast moone maketh full sea) high water at three of the clocke, a day after the new or full moone at three of the clocke 24 minutes, two dayes after at foure of the clocke and 36 minutes, and foure dayes after the new or full moon at six of the clocke 12 minutes.

Here follow the Table of the Water tydes.

West and by North, and East and by South.			Westnorthwest, and Eastsoutheast.			Northwest by west, and Southeast by East.		
da	ho	mi	da	ho	mi	da	ho	mi
0	12	0	0	1	30	0	12	45
1	12	48	1	2	18	1	1	33
2	1	36	2	3	6	2	2	21
3	2	24	3	3	54	3	3	9
4	3	12	4	4	42	4	3	57
5	4	0	5	5	30	5	4	45
6	4	48	6	6	18	6	5	33
7	5	36	7	7	6	7	6	21
8	6	24	8	7	54	8	7	9
9	7	12	9	8	42	9	7	57
10	8	0	10	9	30	10	8	45
11	8	48	11	0	18	11	9	33
12	9	36	12	11	6	12	10	21
13	10	24	13	11	54	13	11	9
14	11	12	14	12	42	14	11	57
15	12	0	15	13	30	15	12	45
At the Iuttish islands			Under the Holy land			Within the mase		
Before the Hever, Eyder, and			Before the mase and Goeree,			within the Veer		
Flye. Before Emden and Delfe-			Before the Veere,			at Flushing		
ziel. Before Enckhuysen, Horn on the sa-			at Armewe. Vpon the flat be.			Neare Bevesier in Sea		
and Orck, upon all the coasts me stroke.			fore Rammekens. Before the			In the Chamber		
off Flanders, upon the fore-			Wielingsh. On the Sealand			In Charnsey		
land. At Doever in the Bier.			coasts. Before the Thames off					
at Bevesier on the sand, at			London					
Hanson on the Kay. Before			Before Yarmouth					
Schietenburgh and the Ras off			In Duyns on the Road					
Blaukert.			Neare the Cingle.					
at Olfernes.			On the wester of VVight					
in the Conduit			without Callice and Swarte-					
at Iubleter in the Road.			nes. In Blavet					
			Bulline at the land.					

A briefe Instruction off the art off Navigation.

West and by North, and East and by South.

da	ho	mi	
0	6	45	Betweene Fawyck and Fa-
1	7	33	mouth in the channell,
2	8	31	A middelt in the channell,
3	9	9	At Bristow, at the Key,
4	9	57	Before S. Nicolaes and rode-
5	10	45	semske,
6	11	33	
7	12	21	
8	1	9	
9	1	57	From the
10	2	45	land Bas
11	3	33	to Marwa-
12	4	21	nen along
13	5	9	land.
14	5	57	
15	6	45	

Westnorthwest, and Eastsoutheast.

da	ho	mi	
0	7	30	At the Nefse by VVieringhen,
1	8	18	in Texel in the Copevaer-
2	9	6	ders Rode,
3	9	54	At Kilduyn,
4	19	42	In the middle of the channell
5	11	31	in the Farreway,
6	12	18	Neare Goutitert in the chan-
7	1	6	nell,
8	1	54	And between Moushole and
9	2	42	Famouth in the Sea,
10	3	30	Neare Plymmouth in the Sea
11	4	18	At Lezart by the land.
12	5	6	
13	5	54	From jerg
14	6	42	fleur, to
15	7	30	Syenhooff.

Northwest by west, and Southeast by East.

da	ho	mi	
0	8	15	Without the Kiscasses in the
1	9	3	channell.
2	9	51	by VVight in the channell.
3	10	39	From Wight to Beviser by the
4	11	27	land.
5	12	15	Upon the VVestcoast off the
6	1	3	Foreland,
7	1	51	VVithout the Flye.
8	2	39	
9	3	27	
10	4	15	
11	5	3	
12	5	51	
13	6	39	
14	7	27	
15	8	15	

Northwest, and Southwest

da	ho	mi	
0	9	0	Before the East and west Eem-
1	9	48	les,
2	10	36	before the Flye.
3	11	24	before the Scholbalgh.
4	12	12	On all the Freese coasts.
5	1	0	Upon the Freese and VVierin-
6	1	48	ger Flack.
7	2	36	before Crammer winterduyn
8	3	24	and Yarmouth.
9	4	12	Within the Seyne.
10	5	0	At the east end of Wight.
11	5	48	In the Rasse of Portland.
12	6	36	Betweene Garnsey and the Kif-
13	7	24	calles.
14	8	12	
15	9	0	

Northwest by north, and Southeast by South.

da	ho	mi	
0	0	45	The Needles off Wight.
1	10	33	In the channell wight.
2	11	21	The Kiscasses.
3	12	9	At Garnsey in the channell
4	12	57	Neare Leytiff and Yarmouth
5	1	45	without the bancks.
6	2	33	At Tergouwe.
7	3	21	At the wolfs-horne.
8	4	9	
9	4	57	
10	5	45	
11	6	33	
12	7	21	
13	8	9	
14	8	57	
15	9	45	

Northnorthwest, and Southsoutheast.

da	ho	mi	
0	10	30	At Olfersnes and Hardwige
1	11	18	without the bancks.
2	12	6	At Leytiff in the Rode,
3	12	54	Yarmouth in the Road
4	1	42	before the Thames of London
5	2	30	At Margat.
6	3	18	At Wight within.
7	4	6	At Beunen Deepe and Seyn-
8	4	54	hooff.
9	5	42	In the Bosse of Caen
10	6	30	At Struyfaert, and al the coasts
11	7	18	of Normandy and Pic-
12	8	6	cardy.
13	8	54	At S. Helena and Calveroort
14	9	42	
15	10	30	

Westfouthwest, and Eastnortheast

da	ho	mi	
0	11	15	Between Cripplesand and the
1	12	3	Kieyl.
2	12	51	VVithin at Olfersnes.
3	1	39	As Hampton.
4	2	27	At Pouchmouth, and at Wol-
5	2	15	fe's horne.
6	3	3	At Calveroort in wight,
7	4	51	Before the haven of Caen.
8	5	39	VVithin the Thames off Lon-
9	6	27	don.
10	7	15	
11	8	3	
12	8	51	
13	9	39	
14	10	27	
15	11	15	

How to finde the age of the Moone.

To doe this without an Almanach, you must know the Epact or Key of the year, and that you shall finde by the Golden number, and the Golden number thus: looke how many year there are past from that year of our Lord, 1500 and these deuide by 19 and what remains is the Golden number of that year, if there remaine nothing, the Golden number is 19.

Example.

I desire to know the Golden number of the year 1645, setting the 1500 a side, I deuide the 145 years wit 19, I find seven times, and the remainder is 12. Then the Golden number of the year 1645 is 12.

Golden Number.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
New Epact.	1	12	23	4	15	26	7	18	29	10	21	2	13	24	5	16	27	8	19
Old Epact.	11	22	3	14	25	6	17	28	9	20	1	12	23	4	15	26	7	18	29

The Epact being knowne, you shall adde it to the number of the moneths that are past from March to the moneth you are in, the same moneth being reckoned with it, if this brings forth 30, then it is new moon the first day of the same moneth, but as much as it is lesse then 30 so many dayes you have to the new moone.

Example.

In the year 1641, I desire to know when the moone shall be new in the mooneth Augutt, the Epact of that is 18, adding to this 6 for the number of the moneths since March (the moneth of August being included) it makes 24, there want 6 to make it 30, therefore, the moone shall be new 6 dayes at this, that is the 6 of August.

The Epact, the number of the moneth past from March and the day of the moneth being added, such a number, (or what soever it brings forth, more then 30) it sheweth the age of the moone.

I. Example.

To know the age of the moon on the 12 of August 1645, I adde the Epact 2 to 6, the months past, & 12 for the 12 dayes, they make this 20, is the age of the moone, but this is to be understood after the new stile.

To finde out easily without casting up the time the new moon, we have here a joynd an Almanach for 10 yeares next ensuiing, calculated by the meridian of Amsterdam, shewing the day and houre of every new and full moone, together with the quarters, the use of it is thus: by the moo-

The Golden number increaseth every year with the beginning off the year with one, as in the year 1640, it is 8, 1641 it is 9, and so forth to 19, after that againe 1, 2, 3, &c. The Epact changeth every year on the first of March increasing with 11 to 30, but being more then 30, you must leave that 30 and the remainder is the Epact. You shall finde it by the Golden number on the 3 joynts of your thumme, beginning with one at the lower joynts, unto the Golden number of your year proposed, doth end this kind of telling at the lower joynt, and then the Epact and the Golden number are all one: but if it end on the second joynt, adde 10, if on the third joynt, adde 20 by the same Golden number, that number is the Epact of that year.

Example.

I desire to know the Epact of the year 1645, the Golden number is 12, tellingh on the joynts of the thumme, beginning with one at the lower joynt, the telling endeth with 12 on the highest joynt, adding 20 to 12, you shall have 32 subtract 30, there remaines 2 for the Epact off that year.

After the old stile, the Golden number is the selfsame with the new stile, but the Epact is 10 more, therefore if you adde 10 to the Epact of the new stile, you shall have the Epact of the old stile, as for the year 1645, 10 to 12, (the Epact of the new stile) comes 22, this is the Epact of that year according to the old stile.

But find the Epact without telling, is the Golden number to know but according to the old and new stile, looke on this Table following, where they are set the one by the other.

A	B	C	D
G	B		
F		C	
E			D

ne in every mooneth there are two columnes of ciphers, the first sheweth the day of the moneth, the second the houres and minutes of and full moone, to reckon from the noone of the same day following, to the use and custome of Astronomere.

Example.

I would know in the year 1625, in the moneth of Iuly, on what day and houre the moone will be new, and I finde the new moone, on the 5 day, 18 houres, 31 min. telling from noone tyde, and this runne to the next day in the morning at 6 of the clock.

To know what day of the weeke that will bee, you must first know the Dominical letter of that year, and with what letter each moneth beginneth, the Sundayes letter you shall find under the Almanach off each, the leap-year hath two, the first you shall use to the 24 of February, the other to the end of the year, every moneth beginneth with such a letter as this table following sheweth.

January	} begin with {	A	April	} begin with {	G
February		D	May		B
March		E	June		C
Iuly	} begin with {	G	October	} begin with {	A
August.		C	November		B
September		F	December		E

For as much as Iuly beginneth with a G you shall begin to tell at ground

ground to 5, and that fall out in E, that is the third day after B, the Dominicall letter of that yeare, and so it will bee wednesday, and so in all the other. In the Leape yeare you must tel both the 24 and 25 on F, because the 25 day and 24 were added on F.

Of the CARDE.

IT is knowne to every man, especially to those that understand the grounds of Cosmographie, that the earth with the waters make one complete round body, and therefore it can not be, that you should set forth the same perfectly in a plane or Carde, either in the hole or in part, but there will be some want, for it is impossible to make a plaine agree with a round forme in all the parts thereof. So that your common cardes many times fayle in truth, especially those that comprehend great and long voyages by Sea, and far from the Equinoctiall, but the Maps which are commonly used in this Countrey, of the Easterly and West-erly Navigation, are without fault, or at least the errors are so little that they hinder not.

They are very fit Instruments to be used at sea, and our forefathers, which have invented them, have brought no small profit and utility to Mariners. The fault of them consist in this, and thus it may be seene: If you would saile a Triangle, the 2 first sides will bee sailed on their strokes, and distances, but from the 2 to the 3 place (that is the 3 side of the Triangle) it will fayle both on the strokes and distances.

Example.

I saile from the Lizard a straight course to the Ilands of Canary, and from thence againe to the Ilands of Corvo and Flores, on which foresaid itrocks, and distances many Maps, are very complete and perfect. But if I would saile againe from Corvo to the Lizard, from whence I first sailed, the Card will shew me an imperfect way, to wit, it will seeme farther wide in the Card, then indeed it is, also it will differ on the points of the Compasse: so that you must direct your course more northerly then that which your Card directeth.

In so short a journey, as this above sayd, it is not much observed, neither it is worth the observation: but those that sail to the West-Indies, shall soone perceive it, when they set saile, they take their course far to the south, and there they finde their Cards of a fit length because the Cards are fitted to it; But in their returne, when they take their course northward, they finde the way much shorter then their Cardes shew them.

This is the cause: All the Lines in the Card from north and south are drawne every where at an equall distance each from other, from the Equinoctiall to the Pole, but on a globe which is made round like the earth, they are not of an equall distance, but the more northerly they come, so much the neater they come each to other. So that two strokes from north to south at the latitude of 60 degrees, are but halfe so wide from one another, as they are at the Equinoctiall, and at the Pole they each other. Therefore two shippes being under the Equinoctiall distant

from one another two hundred leagues, they may both saile directly north without hinderance, coming to the height of 60 degrees but being 100 leagues from each other, and that following the same course, they would in the end meet each other under the Pole, but if you direct such 2 shippes by a plaine Carde, they will be alway at equall distance, by which it sufficiently appeales, that all places lying far north, are much to wide, unless they drawne in, which can not be done, but you must make other places more faultly.

Of the Sunnes Cyclo, also Cyclo Indictional or Romish Indiction.

BY the Cyclo of the Sunne is to be understood 28 years, in which time the Sundayes letter turneth againe at his beginning. If you will know the Ciclum of the Sunne (untruely called the Circle of the Sunne) for the year 1643, adde then 9 to the same number because Christ is borne in the tenth year of the Cyclo, Devide that number with 28, then you finde in the quotient how many times the Cyclo is turned since Christ was borne, and that there remaineth is the Cyclo of the yeare.

Example.

If you desire to know the Cyclo of the Sunne from the yeare 1643, adde 9 thereto, then comes 1652, devide that with 28 then comes in the quotient 59, how many times the Ciclus is turned over since Christ was borne, because there remaineth nothing, so is the Sunnes Ciclus for the yeare 2643.

The Roman Indiction is ordered by the Romans, at that time when they had brought the whole world under their command, it is a number of 15 yeares, which did devide in 3 Lustra.

In the first Lustra or 5 yeares did they gather gold for the enriching of the Empecour.

In the second Lustra did they gather Silver, for the payement off the Souldiers.

In the third, did they gather Iron and Steele, for reparation of her Armes. He that desire to know more hereof, may read *Tit. Liv. lib. 1.*

The Roman Indiction beginneth al wayes upon the first day of Sept. For to know yearly the how maniest indiction it is, adde then 3 unto the date of our desired yeare, for men doth hold, that Christ is borne in the third yeare Indictionis, devide that number with 13, that which remaineth is the Indiction for the yeare; If there remaineth nothing then is the Indiction 13. The quotient sheweth how many times the Indiction is turned over.

Example.

I desire to know the Indiction of Anno 1644. I adde 3 thereunto, comes 1647. I devide that with 13, then comes in the quotient 126, 9, and there remaineth 12 that is the Roman Indiction for that yeare.

Almanach for the yeare 1649. New stile.

moone.	da	ho	mi	moone.	da	ho	mi
last quart.	5	4	22	last quart.	1	6	27
new moon	12	12	45	new moon	9	8	44
first quart.	20	8	30	first quart.	16	2	40
full moon	28	1	50	full moon	23	7	52
last quart.	3	20	52	last quart.	30	23	34
new moon	11	2	48	new moon	7	20	18
first quart.	19	5	40	first quart.	14	17	54
full moon	26	13	39	full moon	21	18	46
last quart.	5	5	34	last quart.	29	17	16
new moon	12	19	6	new moon	6	6	32
first quart.	20	23	52	first quart.	12	23	16
full moon	27	23	14	full moon	20	7	50
last quart.	3	15	16	last quart.	28	12	0
new moon	11	11	52	new moon	5	16	14
first quart.	19	13	20	first quart.	12	8	15
full moon	26	7	28	full moon	20	0	10
last quart.	3	2	20	last quart.	28	4	41
new moon	11	4	12	new moon	4	2	2
first quart.	19	0	3	first quart.	10	19	0
full moon	25	15	0	full moon	18	19	0
last quart.	1	15	33	last quart.	26	19	10
new moon	9	19	20	new moon	3	12	21
first quart.	17	7	10	first quart.	10	9	42
full moon	23	22	34	full moon	18	14	31
				last quart.	26	7	12

Almanach for the yeare 1650. New stile.

moone.	da	ho	mi	moone.	da	ho	mi
new moon	1	23	0	first quart.	6	7	0
first quart.	9	4	6	full moon	12	22	22
full moon	17	8	52	last quart.	19	22	20
last quart.	24	17	6	new moon	28	2	28
new moon	31	11	12	first quart.	4	14	33
first quart.	8	0	8	full moon	11	6	42
full moon	16	0	8	last quart.	18	14	16
last quart.	23	1	15	new moon	26	16	0
new moon	12	3	58	first quart.	2	20	56
first quart.	9	22	9	full moon	9	13	34
full moon	17	14	40	last quart.	17	8	37
last quart.	24	8	28	new moon	25	4	46
new moon	31	13	56	first quart.	2	3	4
first quart.	8	17	18	full moon	2	3	50
full moon	15	23	52	last quart.	17	4	20
last quart.	20	15	30	new moon	24	16	5
new moon	30	5	0	first quart.	31	10	12
first quart.	8	9	0	full moon	7	19	28
full moon	15	8	15	last quart.	15	23	43
last quart.	22	23	24	new moon	23	4	17
new moon	29	20	33	first quart.	29	19	32
first quart.	9	21	29	full moon	7	13	46
full moon	12	15	30	last quart.	15	17	26
last quart.	20	9	54	new moon	22	22	44
new moon	28	11	50	first quart.	29	8	4

Almanach for the yeare 1651. New stile.

moone.	da	ho	mi	moone.	da	ho	mi
full moon	6	9	14	full moon	2	13	38
last quart.	14	8	34	last quart.	9	6	44
new moon	21	1	24	new moon	17	3	26
first quart.	27	23	40	first quart.	25	4	43
full moon	5	4	16	full moon	31	22	26
last quart.	12	20	29	last quart.	7	17	9
new moon	19	11	47	new moon	15	18	46
first quart.	26	18	0	first quart.	23	15	0
full moon	6	21	12	full moon	30	5	50
last quart.	14	5	6	last quart.	6	6	45
new moon	20	22	31	new moon	14	10	31
first quart.	28	13	18	first quart.	21	23	19
full moon	5	11	37	full moon	28	14	57
last quart.	12	11	33	last quart.	5	23	43
new moon	19	10	22	new moon	14	2	3
first quart.	27	8	0	first quart.	21	6	32
full moon	4	23	13	full moon	28	2	19
last quart.	11	17	2	last quart.	4	9	40
new moon	18	23	7	new moon	12	16	34
first quart.	27	1	14	first quart.	19	13	16
full moon	3	8	12	full moon	26	16	30
last quart.	9	23	0	last quart.	4	17	7
new moon	17	12	54	new moon	12	5	38
first quart.	25	16	56	first quart.	18	22	32
				full moon	26	9	8

The Golden num. off this yeare is 16 the Epact 16 Roman Indiction 2 Sunday letter C, the after-winter 7 weeks 2 dayes Quadrages, the 21 of Februar. Easterday the 4 of April, Ascension 13 of May Whit-sunday the 23 of May, Advent, the 28 of Novemb. there will be 5 Eclipses, 2 off the moon, 3 of the Sun, both of the moon, and the middle of the Sun shall be seen in our Horizon the 1 of the moon 26 May, 3 hour, and 36 min. the 1 of the Sun, 9 June, at the 19 hou. 57 min. the 3 of the Sun the 4 of Nov. 3 hou. 9 min. and shall be seen of us the 4 will be of the moon the 19 of Nov. 7 hou. 34 min. the 3 of the Sun 4 Decemb. 12 hou. 35 min. and it shew it selve the 1 ly parts off the world, under our Horizon.

The Golden number is 17, the Epact 27, the Roman Indiction 3, the Sunday letter B, the after-winter 9 weeks, 1 daye, Quadrages, the 6 March, Easter the 17 off April, Ascension the 26 May, Whit-sunday the 5 off June Advent the 27 November, 4 Eclipses, 2 off the Sun, 2 off the moon, which may be both of them seen off us in the evening at 8 houres 41 minutes, the 2 of the moon, the 8 off November in the morning 7 houres 28 minutes, the off the Sun fall both under our Horizon the 1 will be seen in the southerly parts off America as in Peru, the other fallth on the east off our Horizon will be scene in India and Persia and that extra Gangem.

The Golden number is 18, the Epact 8, the Roman Indiction 4, Sunday letter A, the after-winter 8 weeks. Lent the 26 Febr. Easter the 9 off April, Ascension the 11 off May, Whit-sunday the 28 off May, Advent the 3 off December 2 Eclipses off the Sun, but neither off both shall be seen in our Hemisphere 1 shall be the 19 off April, 10 houres 41 minutes, and shall be seen in California, and in the westerne Sea about the Tropic off Cancer, the 2 of the Sun the 14 of October, 2 houres 3 minut, it will be seen in some places of Africa about Cabo Verde, in Brasilia, and in the south parts off Ameica in Peru, that off the moon shall be scene off none, the darkening being little.

A briefe instruction off the art off Navigation.

Almanach for the year 1652. New stile.

moon.	da	ho	mi
last quart.	3	3	50
new moon	10	17	13
first quart.	17	9	5
full moon	25	3	31
last quart.	2	7	38
new moon	9	13	38
first quart.	15	21	37
full moon	23	22	24
last quart.	2	21	19
new moon	9	13	18
first quart.	16	11	13
full moon	24	16	19
last quart.	1	7	15
new moon	7	22	38
first quart.	15	4	25
full moon	23	7	50
last quart.	30	14	9
new moon	8	8	17
first quart.	14	24	52
full moon	22	20	32
last quart.	29	19	28
new moon	5	18	31
first quart.	13	15	42
full moon	21	6	36
last quart.	28	0	39
new moon	5	6	40
first quart.	13	8	42
full moon	20	15	3
last quart.	27	6	36
new moon	3	19	35
first quart.	12	0	1
full moon	18	22	49
last quart.	25	14	41
new moon	2	10	50
first quart.	10	13	10
full moon	17	6	53
last quart.	24	1	48
new moon	2	4	26
first quart.	10	0	15
full moon	16	15	56
last quart.	23	16	52
new moon	3	22	3
first quart.	11	9	48
full moon	15	2	31
last quart.	22	12	1
new moon	0	16	39
first quart.	37	8	34
full moon	14	15	7
last quart.	21	9	55
new moon	30	5	36

The Golden number off this year is 19 the Epact 19 Roman Indiction 5 Sunday-letters G F after winter five weeks 6 days. Quadrages. the 18 February. Easter the 31 of March. Ascension the 9 off May. White Sunday the 19 off May. Advent the first Decemb. There shall be this year 4 Eclipses, 2 in the Sunne and 2 in the Moone, the first in the moone the 15 March, in the morning at 3 a clocke, 42 minutes, the second in the moone the 17 September in the evening at 7 a clocke, 9 minutes. The first in the Sunne the 8 off April, in the morning at 10 a clocke the second in the Sunne the 2 October in the evening at 5 a clocke, but shall not be scene in these Countreyes.

Almanach for the year 1653. New stile.

moon.	da	ho	mi
first quart.	0	3	2
full moon	13	5	51
last quart.	21	8	1
new moon	28	18	37
first quart.	4	11	47
full moon	11	22	32
last quart.	20	3	33
new moon	27	5	39
first quart.	5	21	15
full moon	13	16	23
last quart.	21	19	21
new moon	28	15	3
first quart.	4	8	22
full moon	12	9	50
last quart.	20	7	9
new moon	27	23	15
first quart.	3	21	23
full moon	12	1	44
last quart.	19	15	43
new moon	26	7	4
first quart.	2	12	40
full moon	10	15	20
last quart.	17	22	4
new moon	24	15	22
first quart.	2	5	32
full moon	10	3	19
last quart.	17	3	4
new moon	24	1	15
first quart.	3	23	11
full moon	8	13	43
last quart.	15	8	7
new moon	22	13	39
first quart.	30	16	26
full moon	6	23	16
last quart.	13	14	37
new moon	21	4	42
first quart.	29	8	39
full moon	6	8	29
last quart.	12	23	50
new moon	20	22	5
first quart.	28	23	26
full moon	4	18	49
last quart.	11	3	7
new moon	19	6	39
first quart.	2	12	9
full moon	11	3	75
last quart.	1	6	24
new moon	16	11	4
first quart.	25	22	55

The Golden number off this year is 1. the Epact 1. Roman Indiction 6 Sunday-letters E, after winter 3 weeks, 4 days; Quadrages. the 2 of March. Easter the 13 off April. Ascension the 22 off May. White Sunday the 1 off June. Advent the 30 off November. There shall be 4 Eclipses this year 2 in the Sunne and 2 in the Moone; the first on the moone the 14 off March, in the morning at 3 a clocke, 44 minutes, after midnight; the second the 11 a clocke, 45 minutes; Both on the Sunne upon the other side of the Earth, without our Horizon.

Almanach for the year 1654. New stile.

moon.	da	ho	mi
full moon	2	14	51
last quart.	10	2	50
new moon	18	4	0
first quart.	25	7	40
full moon	1	4	14
last quart.	9	0	17
new moon	16	18	40
first quart.	23	15	13
full moon	1	18	46
last quart.	10	20	38
new moon	18	6	20
first quart.	24	12	35
full moon	1	10	20
last quart.	9	14	18
new moon	16	15	44
first quart.	23	7	0
full moon	1	1	52
last quart.	9	4	35
new moon	15	23	24
first quart.	12	17	8
full moon	30	17	25
last quart.	7	15	23
new moon	14	6	30
first quart.	21	8	21
full moon	29	8	5
last quart.	6	23	27
new moon	13	13	50
first quart.	20	20	0
full moon	28	12	9
last quart.	5	5	10
new moon	11	12	11
first quart.	19	12	18
full moon	27	11	3
last quart.	3	10	39
new moon	10	9	17
first quart.	18	7	10
full moon	25	2	20
last quart.	2	10	30
new moon	9	23	16
first quart.	16	30	10
full moon	25	9	19
last quart.	1	1	4
new moon	8	15	14
first quart.	16	20	19
full moon	23	13	26
last quart.	30	12	20
new moon	8	1	39
first quart.	16	12	45
full moon	23	6	12
last quart.	30	3	0

The Golden Number off this year is 2 the Epact 12 the Roman Indiction 7 Sunday-letters D, after winter 7 weeks, 3 days Quadrages. the 22 off Febr. Easter the April, Ascension the 14 May. White Sunday the 24 of May, Advent the 29 Novemb. There shall be 4 Eclipses this year, 2 in the Sunne and 2 in the Moone; the 4 in the Sunne the 17 off Febr. in the morning about 7 a clocke without our Horizon; the second in the moone the 3 of March, in the morning about 7 a clocke, shall somewhat be scene off us, the third in the Sunne, the 12 off Aug. in the morning at ten a clocke; and the fourth in the moone the 27 off Augustus in the evening at eleven a clocke shall both be scene by us.

Almanach for the year 1655. New stile.

moon.	da	ho	mi
new moon	7	8	16
first quart.	14	23	53
full moon	21	10	42
last quart.	28	22	31
new moon	6	0	40
first quart.	13	14	51
full moon	20	3	50
last quart.	27	16	2
new moon	7	16	45
first quart.	14	17	5
full moon	21	16	2
last quart.	28	12	14
new moon	6	5	39
first quart.	13	1	20
full moon	20	5	9
last quart.	27	7	17
new moon	5	16	0
first quart.	12	8	4
full moon	19	19	5
last quart.	27	23	22
new moon	6	3	44
first quart.	13	2	0
full moon	21	4	30
last quart.	28	22	34
new moon	3	6	49
first quart.	10	0	20
full moon	18	0	39
last quart.	25	21	54
new moon	1	13	44
first quart.	8	12	30
full moon	16	15	48
last quart.	24	6	36
new moon	30	21	39
first quart.	7	3	44
full moon	15	5	57
last quart.	22	11	49
new moon	2	9	18
first quart.	9	22	32
full moon	14	10	46
last quart.	21	10	48
new moon	28	20	15
first quart.	5	19	12
full moon	13	9	51
last quart.	20	4	36
new moon	27	11	36
first quart.	5	16	10
full moon	11	21	50
last quart.	19	14	6
new moon	27	5	38

The Golden Number off this year is 3, the Epact 23 Roman Indiction 8 Sunday-letters C. After winter 6 weeks 2 days. Quadrages. the 14 Februa. Easter the 28 off March. Ascension the 6 off May. White Sunday the 16 off May. Advent the 28 November. There shall be 4 Eclipses this year, 2 in the Sunne and 2 in the moone, the first in the Sunne shall be scene off us the 6 off Feb. about one a clocke in the afternoon; the second in the moone, and the third in the Sunne doe fall without our Horizon; the fourth in the moone shall scarce be scene off any body, because the darcknesse will be very little.

Almanach for the year 1656. New stile.

moon.	da	ho	mi
first quart.	4	10	44
full moon	11	8	49
last quart.	18	1	47
new moon	26	1	0
first quart.	3	2	0
full moon	9	20	22
last quart.	16	16	2
new moon	24	19	49
first quart.	3	13	38
full moon	10	4	43
last quart.	17	8	33
new moon	25	11	37
first quart.	1	12	19
full moon	8	15	4
last quart.	16	3	10
new moon	24	2	54
first quart.	1	4	44
full moon	8	1	18
last quart.	15	21	4
new moon	23	14	8
first quart.	30	9	50
full moon	6	13	6
last quart.	14	15	7
new moon	21	29	31
first quart.	28	15	20
full moon	4	6	4
last quart.	11	5	52
new moon	21	11	0
first quart.	27	21	9
full moon	4	16	30
last quart.	12	1	19
new moon	19	14	25
first quart.	26	7	10
full moon	3	0	3
last quart.	11	6	30
new moon	17	21	0
first quart.	24	19	17
full moon	3	1	1
last quart.	11	12	22
new moon	17	7	30
first quart.	24	14	51
full moon	1	17	36
last quart.	9	1	0
new moon	15	19	0
first quart.	23	11	32
full moon	1	9	8
last quart.	8	8	47
new moon	15	9	2
first quart.	22	9	15
full moon	30	23	4

The Golden Number off this year is 4, the Epact 4, Roman Indiction 9 Sunday-letters B A, after winter 9 weeks, one day, Quadrages. the 5 off March. Easter the 16 April. Ascension the 25 off May. White Sunday the 4 off June. Advent the 3 off December. This year 5 Eclipses, 3 in the Moone and 2 in the Sun the first in the moon the 11 of January in the evening at 8 a clocke, 49 minut. the second in the Sun the 26 off Janua. at 8 a clocke in the afternoon; we shall see them both; the third in the moon the 6 off July; the fourth in the Sun the 21 off July, and the first in the moon the 21 Decemb. All three without our Horizon.

Almanach for the year 1657. New stile.

moon.	da	ho	mi
last quart.	0	15	5
new moon	14	3	5
first quart.	22	3	1
full moon	29	1	54
last quart.	5	2	50
new moon	11	9	57
first quart.	4	23	51
full moon	17	21	3
last quart.	6	17	14
new moon	4	13	47
first quart.	22	14	2
full moon	9	5	56
last quart.	5	5	57
new moon	3	0	50
first quart.	21	0	10
full moon	27	15	40
last quart.	4	18	58
new moon	12	26	51
first quart.	20	6	66
full moon	26	13	0
last quart.	3	21	8
new moon	11	11	39
first quart.	18	12	1
full moon	25	9	29
last quart.	3	4	29
new moon	10	0	42
first quart.	17	16	54
full moon	24	20	1
last quart.	1	1	35
new moon	9	0	4
first quart.	15	22	12
full moon	23	9	35
last quart.	1	15	54
new moon	7	15	5
first quart.	14	0	34
full moon	22	1	30
last quart.	30	4	42
new moon	6	24	39
first quart.	13	18	9
full moon	21	19	10
last quart.	29	7	32
new moon	5	10	2
first quart.	12	9	23
full moon	20	13	35
last quart.	28	4	28
new moon	4	19	43
first quart.	12	3	58
full moon	20	6	59
last quart.	27	13	14

The Golden Number off this year is 5 the Epact 15 Roman Indiction 10 Sunday-letters G, after winter 6 weeks 6 days. Quadrages. the 18 Febr. Easter day the 1 April. Ascension the 10 May Whit Sunday the 20 May, Advent the 2 Decemb. 4 Eclipses, 4 shall be scene this year, 2 on the Sunne, and 2 in the moon, the 2 on the Sunne shall not be scene off us, but the 2 in the Moone doe shew themselves above the Horizon; the first upon the 25 of June, in the evening at 9 a clocke, and the second the 20 December, in the evening at 7 a clocke.

Almanach for the year 1658. New stile.

moone.		da ho mi		
January.	{ new moon	3	9	15
	{ first quart.	11	1	5
	{ full moon	18	22	54
	{ last quart.	25	21	21
Febua.	{ new moon	1	22	54
	{ first quart.	9	23	12
	{ full moon	17	12	0
	{ last quart.	24	5	40
March.	{ new moon	3	14	39
	{ first quart.	11	19	5
	{ full moon	18	22	30
	{ last quart.	25	14	28
April.	{ new moon	2	6	48
	{ first quart.	10	11	13
	{ full moon	17	3	47
	{ last quart.	24	15	34
	{ new moon	1	23	35

A short Instruction,

Almanack for the year 1668.
New-style.

	Moon.	da.	ho.	mi.
	last quart	6	17	21
	new moon	13	7	49
January	first quart	20	12	54
	full moon	28	16	46
	last quart	5	1	25
Februa.	new moon	11	19	27
	first quart	19	8	45
	full moon	27	8	45
	last quart	5	10	33
	new moon	12	8	8
March,	first quart	20	4	30
	full moon	27	21	44
	last quart	3	15	31
	new moon	10	21	50
April,	first quart	18	23	12
	full moon	26	7	54
	last quart	2	22	26
	new moon	10	12	15
May,	first quart	18	15	11
	full moon	25	15	58
	last quart	1	6	21
	new moon	9	2	52
June,	first quart	17	4	38
	full moon	23	22	57
	last quart	30	16	43
	new moon	8	18	3
Jule,	first quart	16	15	37
	full moon	23	5	50
	last quart	30	5	52
	new moon	7	8	52
Auguf.	first quart	14	23	41
	full moon	21	13	43
	last quart	28	21	49
	new moon	5	23	12
Septe.	first quart	13	5	12
	full moon	19	23	24
	last quart	27	15	39
	new moon	5	12	49
Octob.	first quart	12	11	10
	full moon	19	11	56
	last quart	27	11	22
	new moon	4	1	27
Nove.	first quart	10	17	50
	full moon	18	3	26
	last quart	26	7	11
	new moon	3	13	4
Dec.	first quart	10	3	25
	full moon	17	21	42
	last quart	26	1	44

The golden Number 16.
Epacta 16. Sundayes letter
A G. Quinquag. 12 Febr.
Easter 1 April. Whitsunday
20 May. Advent 2 Decemb.
There shall be 4 Eclipses this
year. The first in the sunne
the 10 May, in the Sout zea,
the 2 in the Moone 26 May in
our Horison, the 3 in the
sunne the 4 Novemb. in our
Horison the 4 in the Moone
den 18 Novemb.

Almanack for the year 1669.
New-style.

	Moon.	da.	ho.	mi.
	new moon	1	23	50
	first quart	8	16	21
January	full moon	16	17	9
	last quart	24	17	37
	new moon	31	10	2
Febru.	first quart	7	8	6
	full moon	15	12	9
	last quart	23	6	10
	new moon	29	20	12
	first quart	9	1	42
March,	full moon	17	5	11
	last quart	24	14	41
	new moon	31	6	48
	first quart	7	19	53
April,	full moon	15	18	59
	last quart	22	20	8
	new moon	29	17	50
	first quart	7	14	8
May,	full moon	15	6	38
	last quart	22	0	41
	new moon	29	6	6
	first quart	6	7	6
June,	full moon	13	11	40
	last quart	20	6	20
	new moon	27	15	19
	first quart	5	22	27
Jule,	full moon	12	23	14
	last quart	19	6	14
	new moon	27	10	4
	first quart	4	12	1
Auguf.	full moon	11	6	17
	last quart	18	0	30
	new moon	26	1	38
	first quart	2	23	14
Septe.	full moon	9	13	33
	last quart	16	14	22
	new moon	24	17	44
	first quart	2	8	18
Octob.	full moon	8	23	3
	last quart	16	7	57
	new moon	24	9	45
	first quart	31	15	51
Nove.	full moon	7	10	30
	last quart	15	3	59
	new moon	23	0	45
	first quart	29	22	46
Dec.	full moon	7	0	41
	last quart	15	0	48
	new moon	42	14	17
	first quart	29	6	41

The golden Number is 17.
The Circle of the Sun 26 Sun-
day letter F. The Roman In-
diction 7. The Epact 27
Quinquagesima 3 March,
Easter 21 April. Whitsun-
day the 9 Iuny. Advent 1 De-
cember. There shall be 2
Eclipses in the sunne. The
firste the 30 April in the mor-
ningh 6 hour. The second the
24 Octob. in the evening 10
houres, but neitser of bots
shall be seen in our Hemi-
sphere.

Almanack for the year 1670.
New-style.

	Moon.	da.	ho.	mi.
	full moon	5	17	28
	last quart	13	21	4
January	new moon	21	2	5
	first quart	27	12	46
	full moon	4	11	46
Febru.	last quart	12	13	1
	new moon	19	12	20
	first quart	26	5	20
	full moon	6	6	19
	last quart	14	5	51
March,	new moon	20	21	36
	first quart	27	19	53
	full moon	4	23	41
	last quart	12	16	41
April,	new moon	19	6	23
	first quart	26	11	59
	full moon	4	15	0
	last quart	11	23	41
May,	new moon	18	15	32
	first quart	26	4	46
	full moon	3	3	29
	last quart	10	3	35
June,	new moon	17	1	28
	first quart	24	21	45
	full moon	2	13	58
	last quart	9	7	39
Jule,	new moon	16	14	6
	first quart	24	14	5
	full moon	0	22	54
	last quart	7	12	56
Auguf.	new moon	15	2	44
	first quart	23	6	12
	full moon	0	7	1
	last quart	5	21	22
Septe.	new moon	13	18	19
	first quart	21	20	44
	full moon	28	15	12
	last quart	5	9	42
Octob.	new moon	13	11	37
	first quart	21	9	22
	full moon	28	0	18
	last quart	4	1	41
Nove.	new moon	12	5	30
	first quart	19	19	40
	full moon	26	10	55
	last quart	3	20	47
Dec.	new moon	11	22	49
	first quart	19	4	51
	full moon	25	23	36

The golden Number is 18.
The Epacta 8. The Sundayes
letter E. Quinquagesima 16
Febr. Easter 6 April, Whit-
sunday 25 Mey. Advent 30
Novemb. 4 Eclipses, the first
of the Moon 5 April, at none.
The second of the Sunne 19
April, at eveningh 7 houres.
The third of the Moon 29
Septemb. at the Morningh
3 houres. The fourth of the
Sunne 13 Octob. at evening
11 a clocke.

Almanack for the year 1671.
New-style.

	Moon.	da.	ho.	mi.
	last quart	2	17	46
	new moon	10	14	19
January	first quart	17	11	47
	full moon	24	13	18
	last quart	1	14	48
	new moon	9	3	37
Februa.	first quart	15	19	28
	full moon	23	6	51
	last quart	3	10	12
	new moon	10	14	6
March,	first quart	17	6	49
	full moon	24	23	59
	last quart	2	2	40
	new moon	8	23	1
April,	first quart	15	15	52
	full moon	23	16	41
	last quart	0	15	38
	new moon	8	15	25
May,	first quart	15	4	40
	full moon	23	7	51
	last quart	31	0	48
	new moon	6	14	25
June,	first quart	13	19	51
	full moon	21	22	10
	last quart	29	6	44
	new moon	5	22	42
Jule,	first quart	13	11	38
	full moon	21	10	28
	last quart	28	10	52
	new moon	4	8	38
Auguf.	first quart	12	5	16
	full moon	19	21	26
	last quart	26	15	35
	new moon	2	20	53
Septe.	first quart	10	22	46
	full moon	18	7	17
	last quart	24	21	32
	new moon	2	11	47
Octob.	first quart	10	16	0
	full moon	17	16	52
	last quart	24	7	34
	new moon	1	5	29
Nove.	first quart	9	7	54
	full moon	16	2	27
	last quart	22	21	43
	new moon	30	24	28
Dec.	first quart	8	21	44
	full moon	15	12	49
	last quart	22	15	10
	new moon	30	19	21

The golden Number 19.
Epacta 19. Sundayes letter D
Quinquag. 8 Feb. Easter 29
March, Whitsunday 17 May.
Advent 29 Novemb. 6 Eclip-
ses. The first of the sunne 11
March. The second of the
Moon 29 March. The third
of the Sunne the 8 April, the
fourth of the Sunne 3 Septem.
The fifth of the Moon 18
Septemb. The sixt of the Sun-
ne the 2 October althogether
without our Horison.

In the Art of Navigation.

Almanack for the year 1672.
New-style.

	Moon.	da.	ho.	mi.
January	First quart	7	8	52
	full moon	14	0	7
	last quart	21	10	46
	new moon	29	12	50
Februa.	First quart	5	17	19
	full moon	12	12	52
	last quart	20	11	37
	new moon	28	3	10
March,	First quart	5	23	50
	full moon	13	2	49
	last quart	21	3	12
	new moon	28	14	48
April,	First quart	4	6	21
	full moon	11	17	51
	last quart	19	20	43
	new moon	26	23	57
May,	First quart	3	14	9
	full moon	11	9	15
	last quart	19	11	24
	new moon	26	7	25
June,	First quart	2	0	6
	full moon	10	0	30
	last quart	17	23	14
	new moon	24	14	25
Iule,	First quart	1	12	23
	full moon	9	15	18
	last quart	17	7	48
	new moon	23	21	36
Auguf.	First quart	31	3	10
	full moon	8	5	19
	last quart	15	13	58
	new moon	22	6	15
Septe.	First quart	29	21	4
	full moon	6	18	30
	last quart	13	18	50
	new moon	20	17	14
Octob.	First quart	28	14	30
	full moon	6	4	46
	last quart	13	0	24
	new moon	20	7	10
Nove.	First quart	28	9	48
	full moon	4	18	7
	last quart	11	8	38
	new moon	19	0	7
Dec.	First quart	27	4	25
	full moon	3	4	52
	last quart	10	20	15
	new moon	18	19	4

The golden Number, and Epacta is 1. The Sundayes letters C B. Quinquag. 28 Feb. Easter 17 April. Whitsunday 5 Iuny. Advent 27 Novemb. 4 Eclipses the first of the Sunne 28 Feb. the second of the Moon 13 March, the third of the Sunne 22 Aug. the fourth of the Moon 6 Septemb. al together without our Horison.

Almanack for the year 1673.
New-style.

	Moon.	da.	ho.	mi.
January	full moon	2	15	14
	last quart	9	11	19
	new moon	17	14	36
	First quart	25	11	10
Februa.	full moon	1	1	42
	last quart	8	5	58
	new moon	16	8	59
	First quart	23	21	30
March,	full moon	2	12	38
	last quart	9	23	43
	new moon	18	0	50
	First quart	25	4	33
April,	full moon	1	0	10
	last quart	8	18	44
	new moon	16	13	46
	First quart	23	9	46
May,	full moon	30	12	44
	last quart	8	12	44
	new moon	15	23	43
	First quart	22	14	44
June,	full moon	30	1	54
	last quart	7	4	28
	new moon	14	7	42
	First quart	20	21	34
Iule,	full moon	28	16	29
	last quart	6	18	52
	new moon	13	14	41
	First quart	20	7	10
Auguf.	full moon	28	7	29
	last quart	5	6	22
	new moon	11	21	44
	First quart	18	19	56
Septe.	full moon	26	22	53
	last quart	3	15	35
	new moon	10	5	49
	First quart	17	11	52
Octob.	full moon	25	14	14
	last quart	2	22	56
	new moon	9	15	47
	First quart	17	6	23
Nove.	full moon	25	4	57
	last quart	1	5	3
	new moon	8	4	28
	First quart	16	23	1
Dec.	full moon	23	18	52
	last quart	30	12	19
	new moon	7	20	9
	First quart	15	23	8

The golden Number 2. Epacta 12 Sundayes letter A. Quinquagesima 12 Febr. Easter 2 April, Whitsunday 21 May, Advent 3 Decemb. 2 Eclipses, The first of the sunne 16 Feb. at evening 2 houres, The seconde 12 Aug. at the Morning 9 houres the seconde of the sunne 12 Aug. at the morning 9 houres.

Almanack for the year 1674.
New-style.

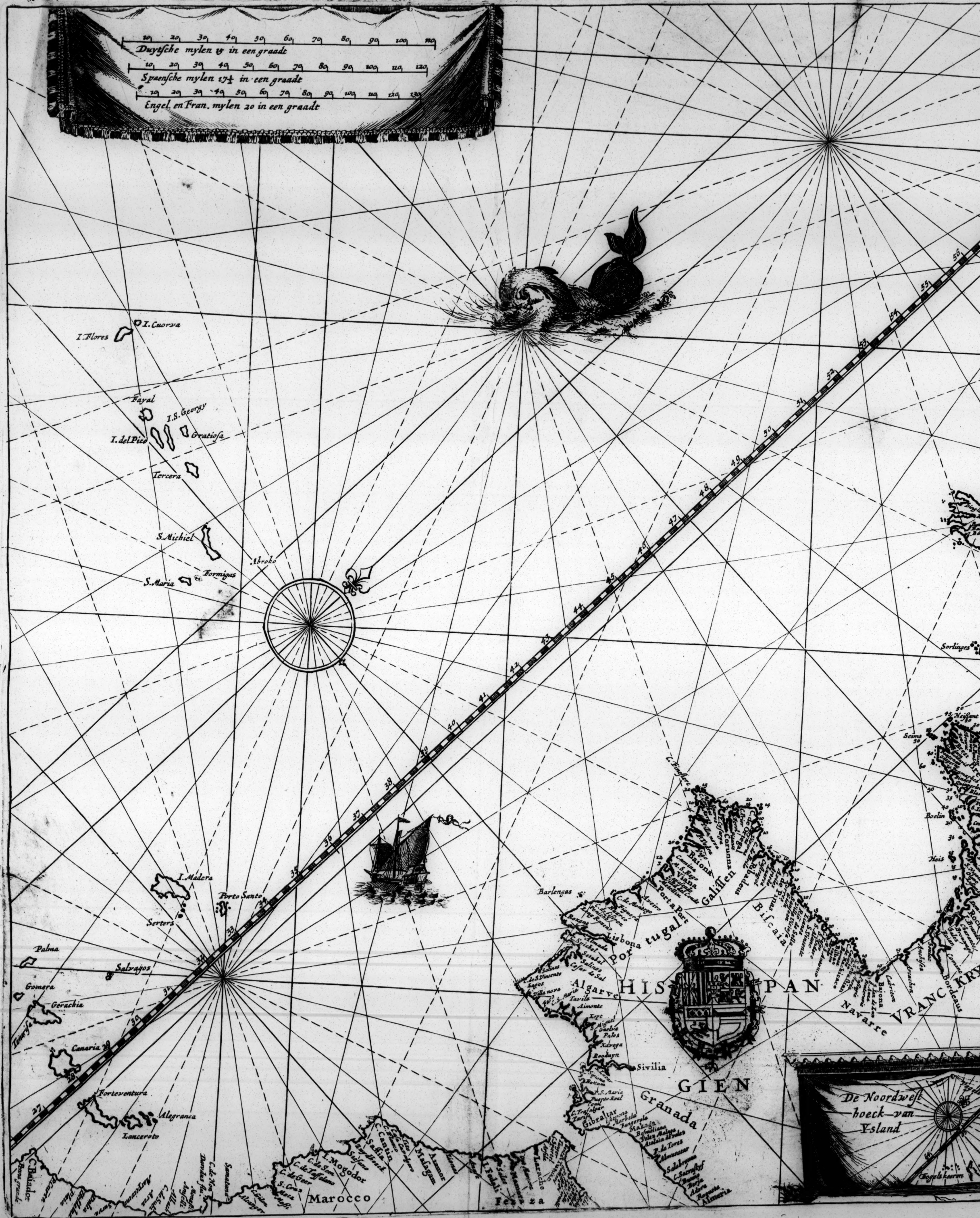
	Moon.	da.	ho.	mi.
January	new moon	6	14	12
	First quart	14	18	16
	full moon	21	17	50
	last quart	28	9	41
Februa.	new moon	5	9	14
	First quart	13	10	23
	full moon	20	3	47
	last quart	27	0	16
March,	new moon	7	3	47
	First quart	14	23	14
	full moon	21	13	17
	last quart	28	16	44
April,	new moon	5	20	26
	First quart	13	7	51
	full moon	19	22	50
	last quart	27	9	56
May,	new moon	5	10	24
	First quart	12	13	18
	full moon	19	8	54
	last quart	27	3	24
June,	new moon	3	21	44
	First quart	10	17	13
	full moon	18	20	14
	last quart	25	20	19
Iule,	new moon	3	6	56
	First quart	9	21	41
	full moon	17	9	5
	last quart	25	12	4
Auguf.	new moon	1	14	54
	First quart	8	4	43
	full moon	15	23	44
	last quart	24	2	30
Septe.	new moon	30	22	30
	First quart	6	15	19
	full moon	14	15	45
	last quart	22	14	57
Octob.	new moon	29	6	37
	First quart	6	5	32
	full moon	14	9	4
	last quart	22	1	41
Nove.	new moon	28	16	12
	First quart	4	23	12
	full moon	13	1	55
	last quart	20	10	17
Dec.	new moon	27	3	39
	First quart	4	19	39
	full moon	12	17	50
	last quart	19	17	46

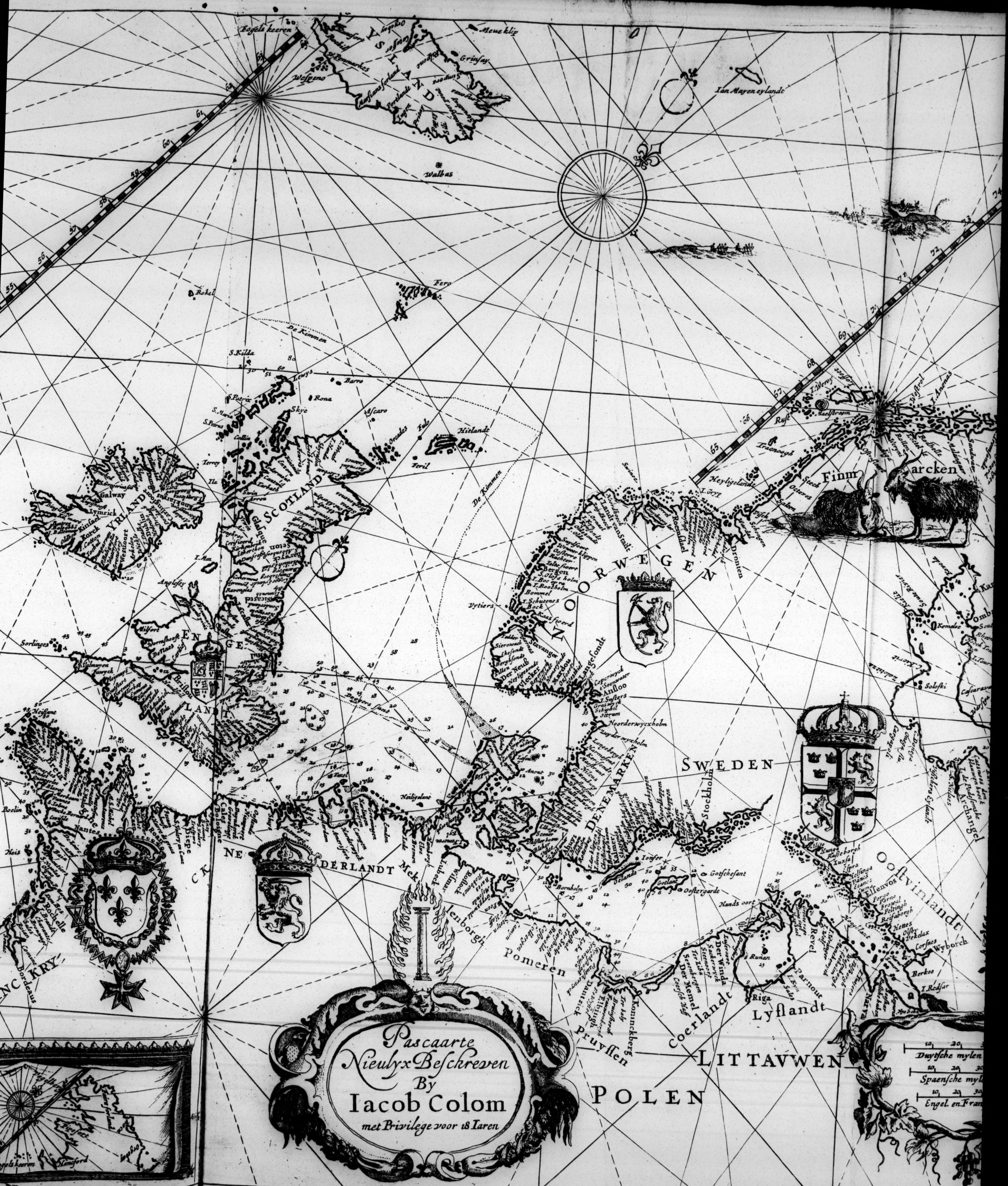
The golden Number is 3. Epact 23. The Sundayes letter G. Quinquagesima 4 Feb. Easter 25 March, Whitsunday 13 May. Advent 2 Decemb. 5 Eclipses, the first of the Moon 22 January. The second of the Sunne 5 Febr. The third of the Moon 17 Iulius, The fourth of the Sun 2 Aug. The fifth of the Sunne 27 Decemb.

Almanack for the year 1675.
New-style.

	Moon.	da.	ho.	mi.
January	First quart	3	16	29
	full moon	11	7	54
	last quart	18	1	17
	new moon	25	10	3
Februa.	First quart	2	13	0
	full moon	9	19	53
	last quart	16	10	30
	new moon	24	3	36
March,	First quart	4	7	10
	full moon	11	5	49
	last quart	17	21	22
	new moon	25	21	22
April,	First quart	2	21	56
	full moon	9	14	26
	last quart	16	11	1
	new moon	24	14	0
May,	First quart	2	8	45
	full moon	8	22	30
	last quart	16	1	48
	new moon	24	4	57
June,	First quart	3	15	53
	full moon	7	6	50
	last quart	14	17	53
	new moon	22	17	48
Iule,	First quart	29	20	20
	full moon	6	16	6
	last quart	14	10	43
	new moon	22	4	48
Auguf.	First quart	29	0	0
	full moon	5	3	22
	last quart	13	3	49
	new moon	20	14	26
Septe.	First quart	27	5	11
	full moon	3	16	58
	last quart	11	20	29
	new moon	18	23	26
Octob.	First quart	25	13	3
	full moon	3	9	2
	last quart	11	12	11
	new moon	18	8	19
Nove.	First quart	25	1	43
	full moon	2	2	56
	last quart	10	2	19
	new moon	16	17	56
Dec.	First quart	23	17	38
	full moon	1	21	42
	last quart	9	14	0
	new moon	16	4	42

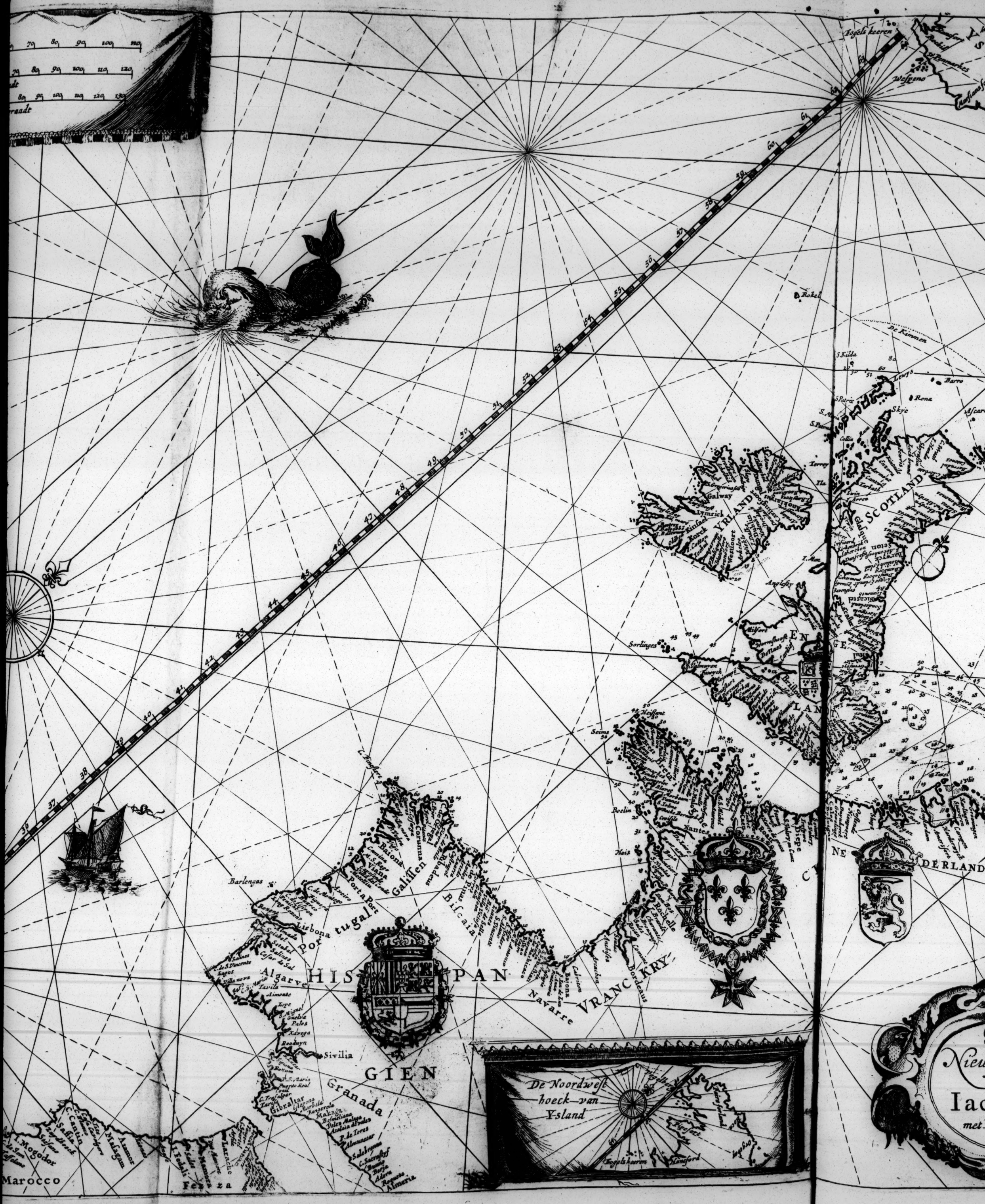
The golden Number and Epacta is 4 the Sundayes letter F. Quinquages. 29 Febr. Easter 14 April, Whitsunday 2 Iuly. Advent 1 Decemb. 4 Eclipses the first of the Moon 11 Iune, the second of the Sunne 23 Iune, the third of the Moon 7 Iulius. The fourth of the sunne 16 Decemb.

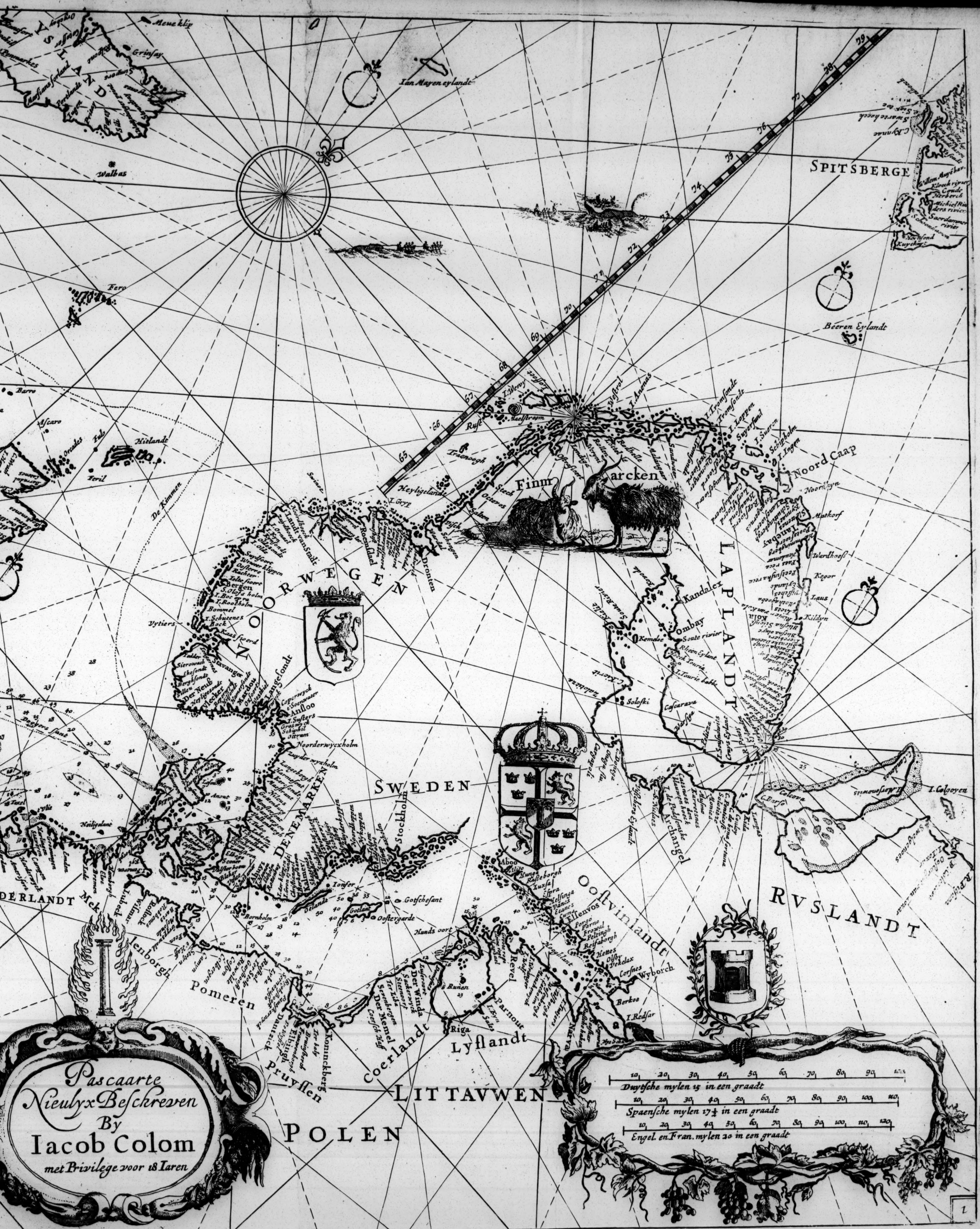




Pascaarte
Nieuwlyx Beschreven
By
Iacob Colom
met Privilege voor 18 Iaren

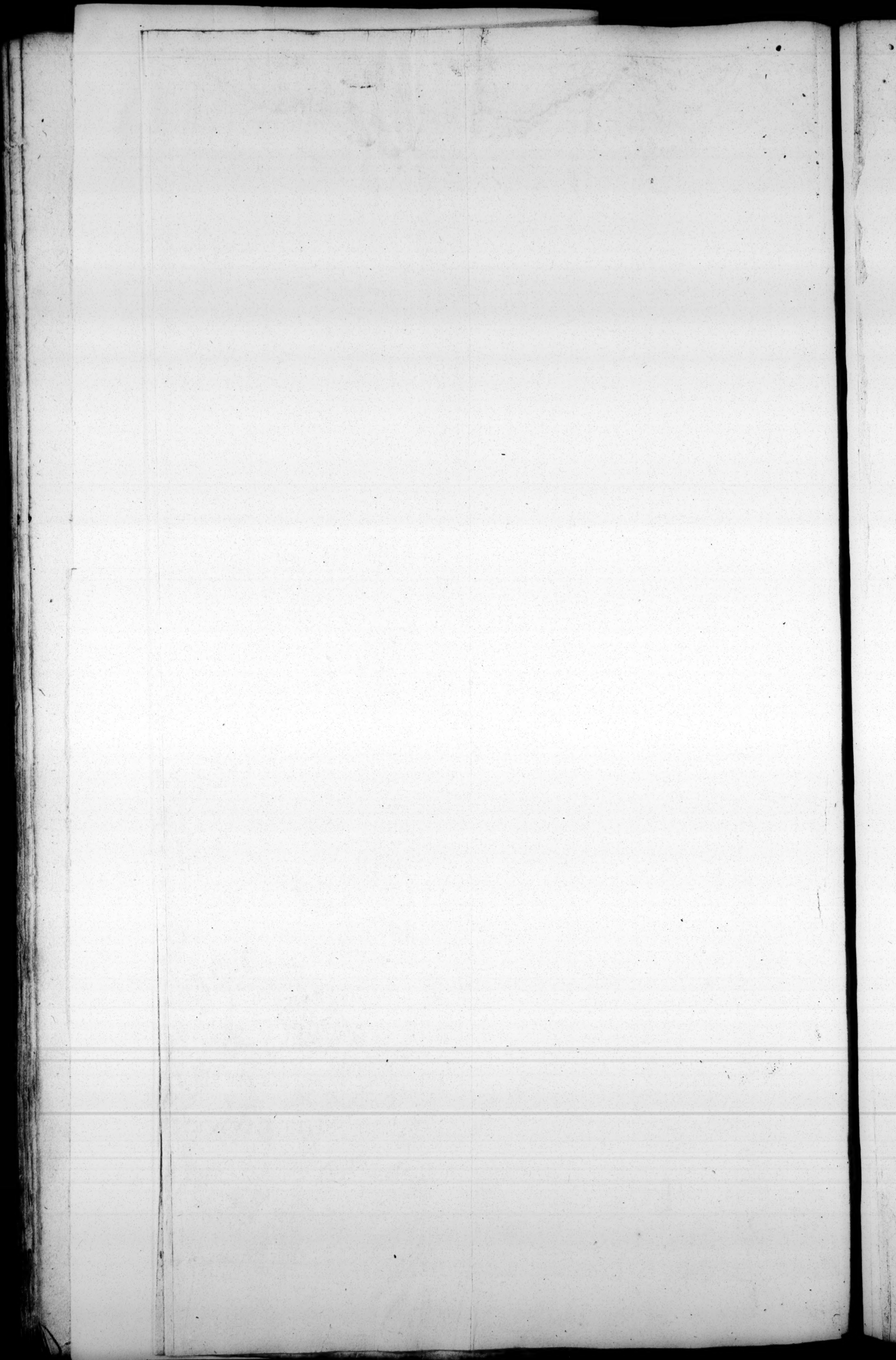
10 20 30
Duytsche mylen
20 20 30
Spaensche mylen
10 20 30
Engel. en Fran.





Pascaarte
Nieuwlyx Beschreven
By
Iacob Colom
met Privilege voor 18 Iaren

10 20 30 40 50 60 70 80 90 100
Duytsche mylen 15 in een graadt
10 20 30 40 50 60 70 80 90 100
Spaensche mylen 17 1/2 in een graadt
10 20 30 40 50 60 70 80 90 100 120
Engel. en Fran. mylen 20 in een graadt

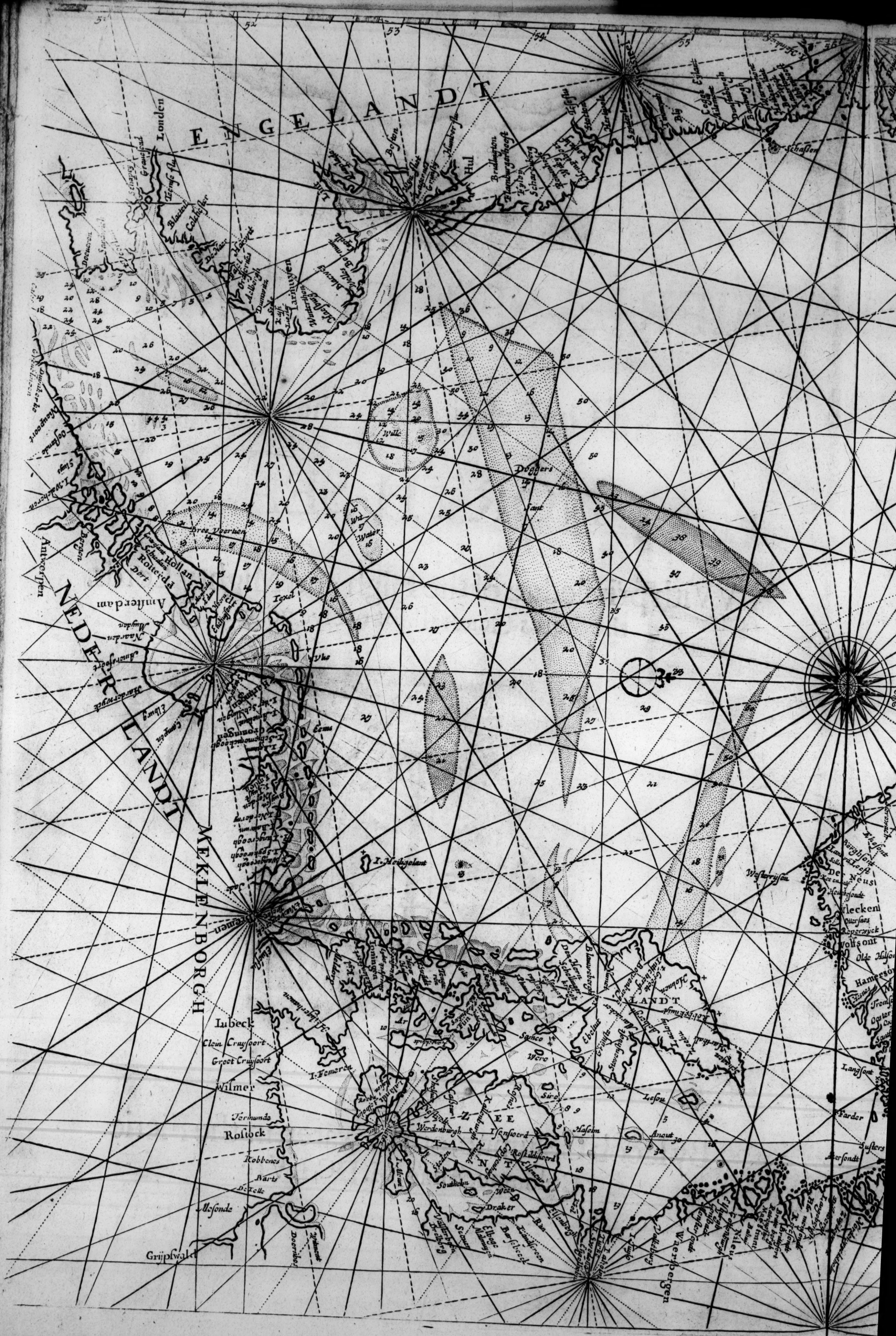


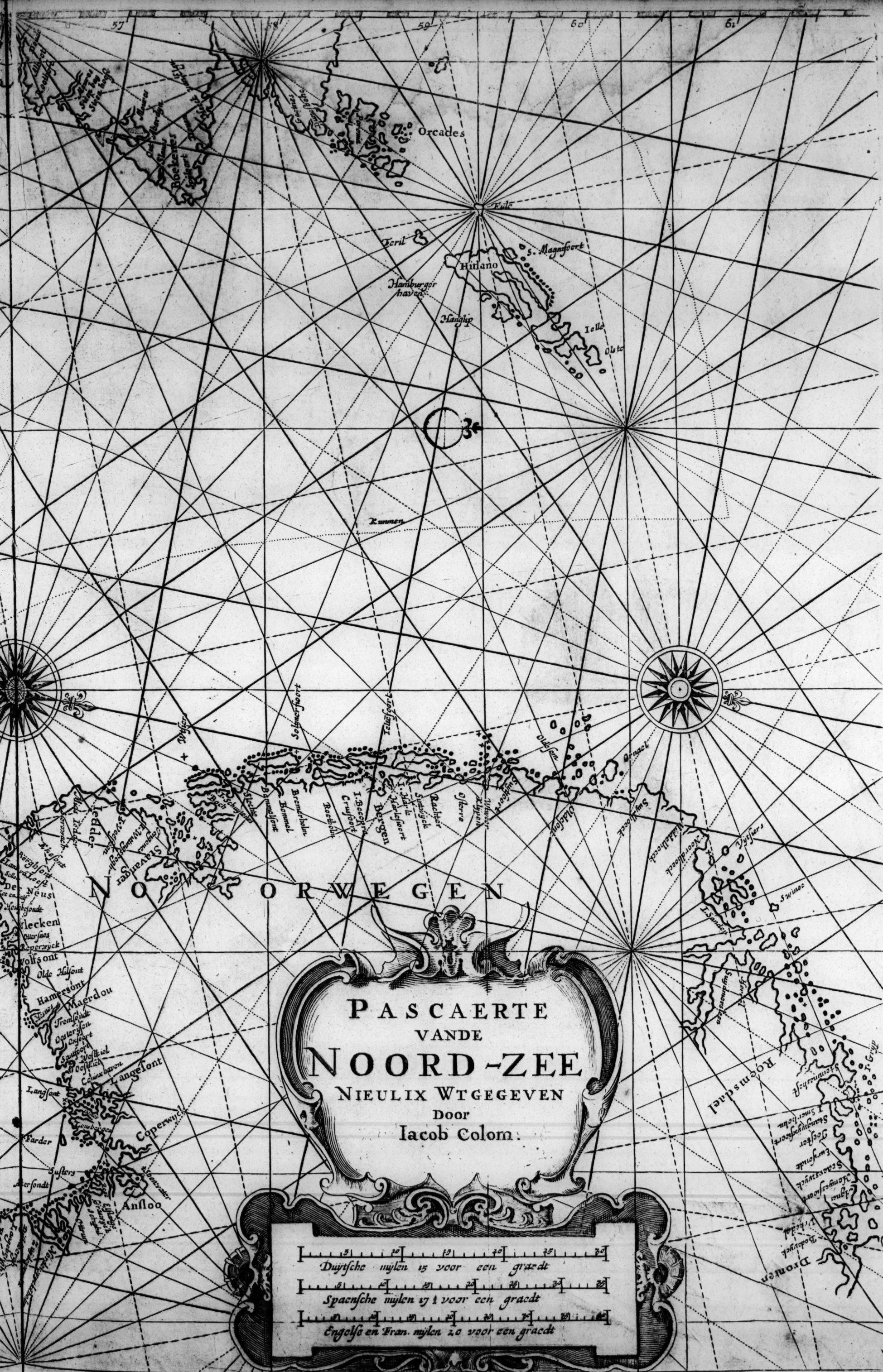
The first part
THE FIRST BOOK
OF THE
FIERIE-SEA-COLVMNE,
WHEREIN
The Description of the whole
NORTH-SEA.

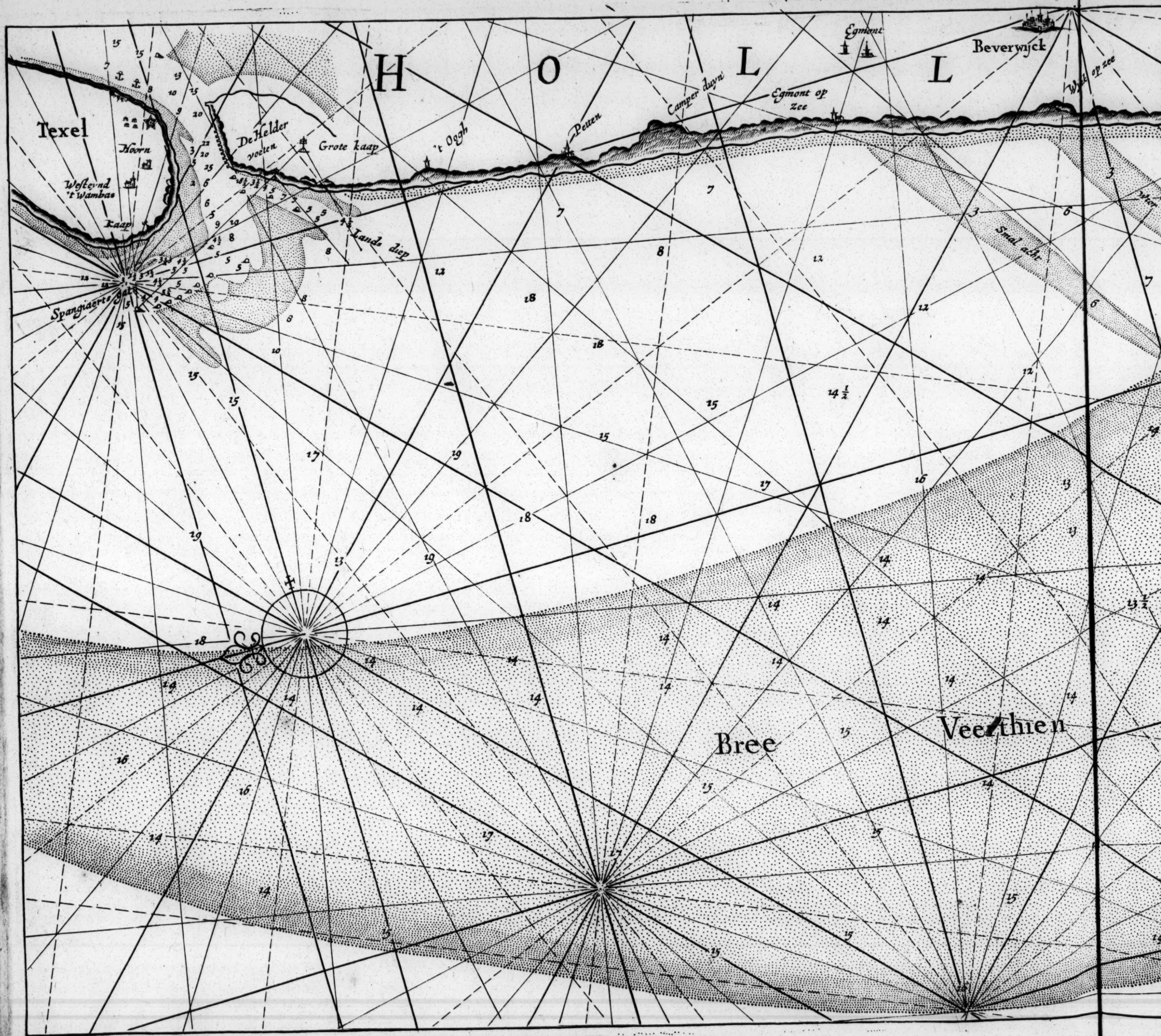
VVith priviledge of the High and Mighty Lords,
the States Generall, for twelve yeares.

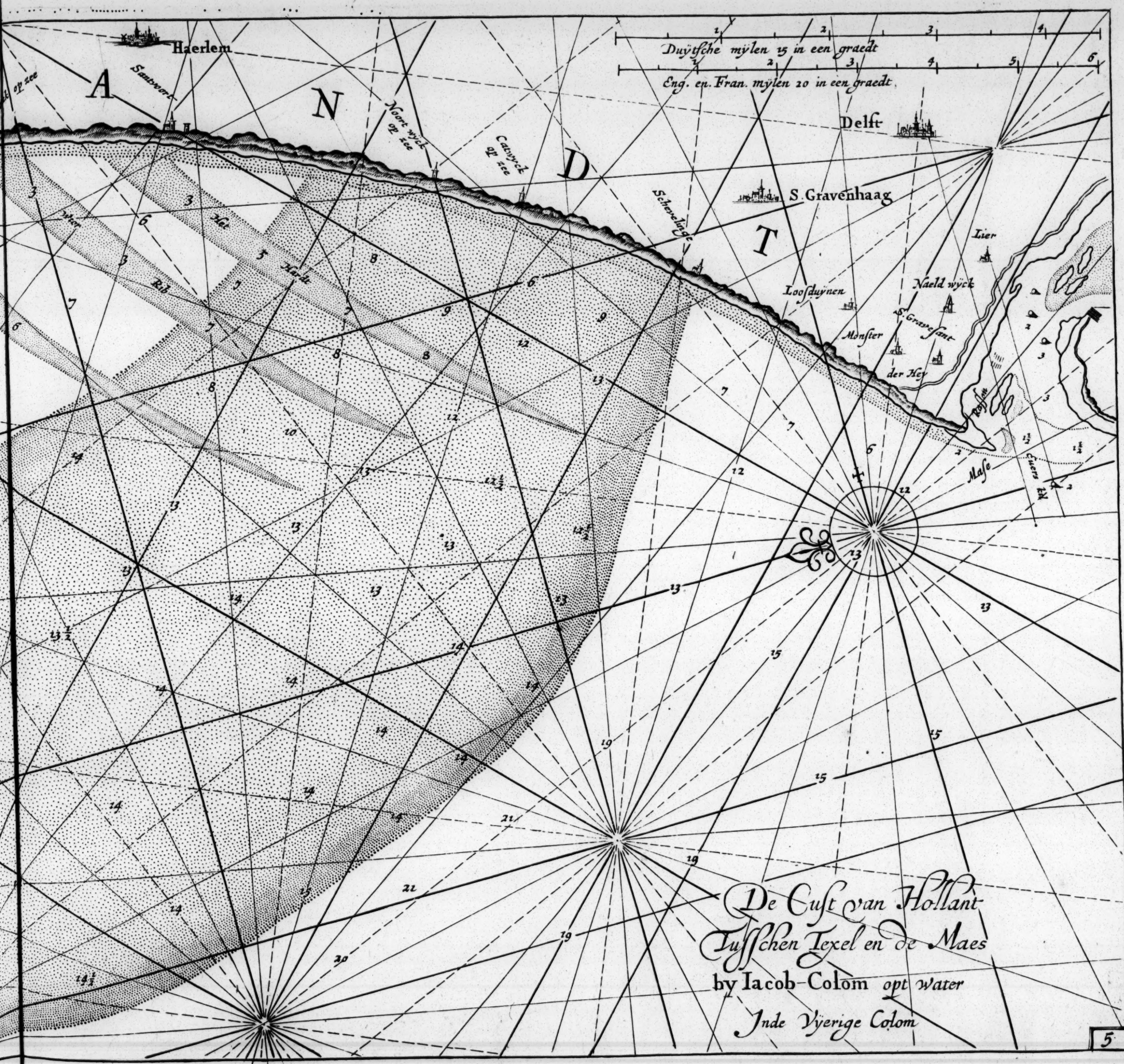


Printed at Amsterdam,
By Iacob Columne, on the water, in the Fieric
Columne,







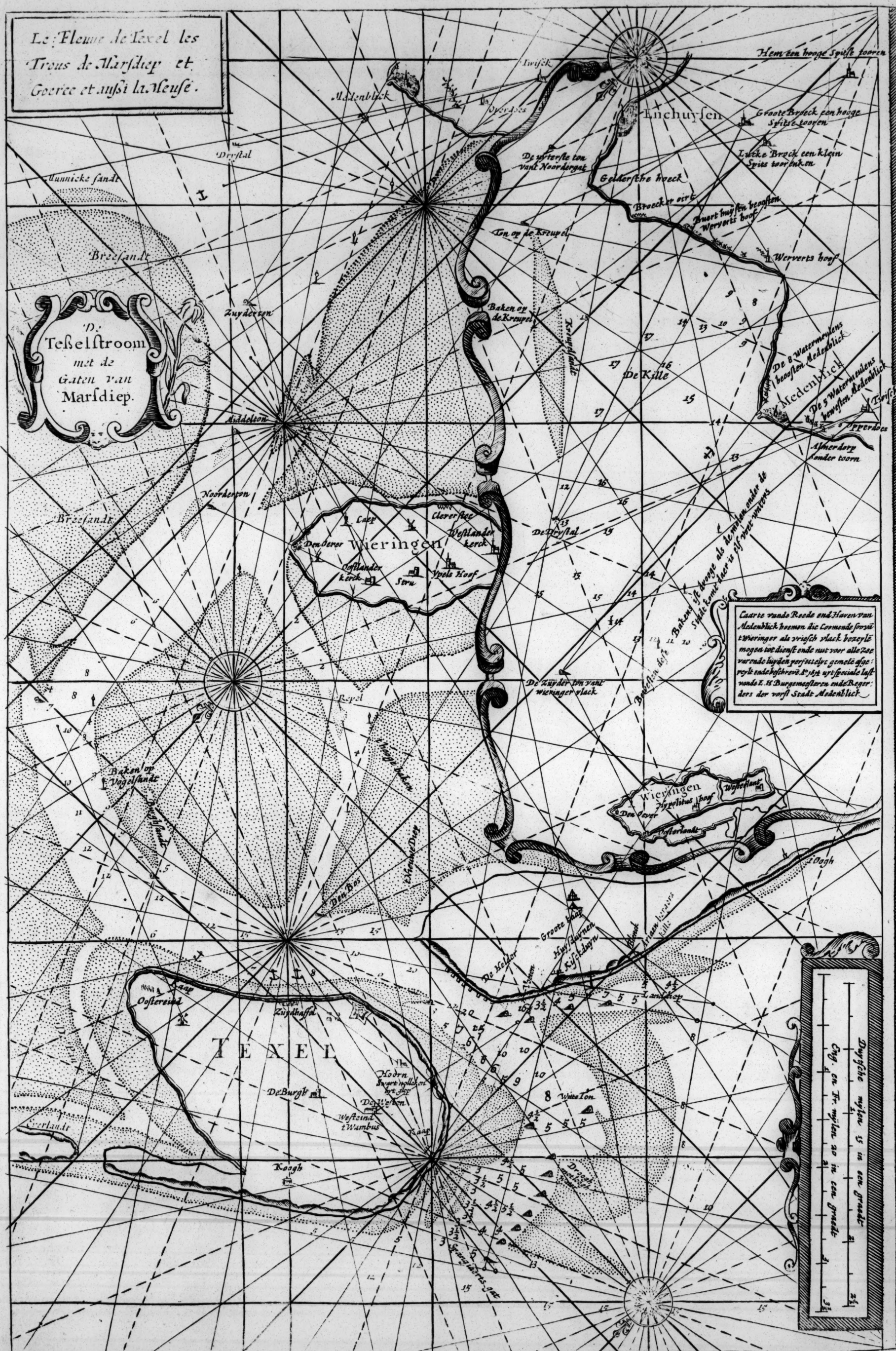


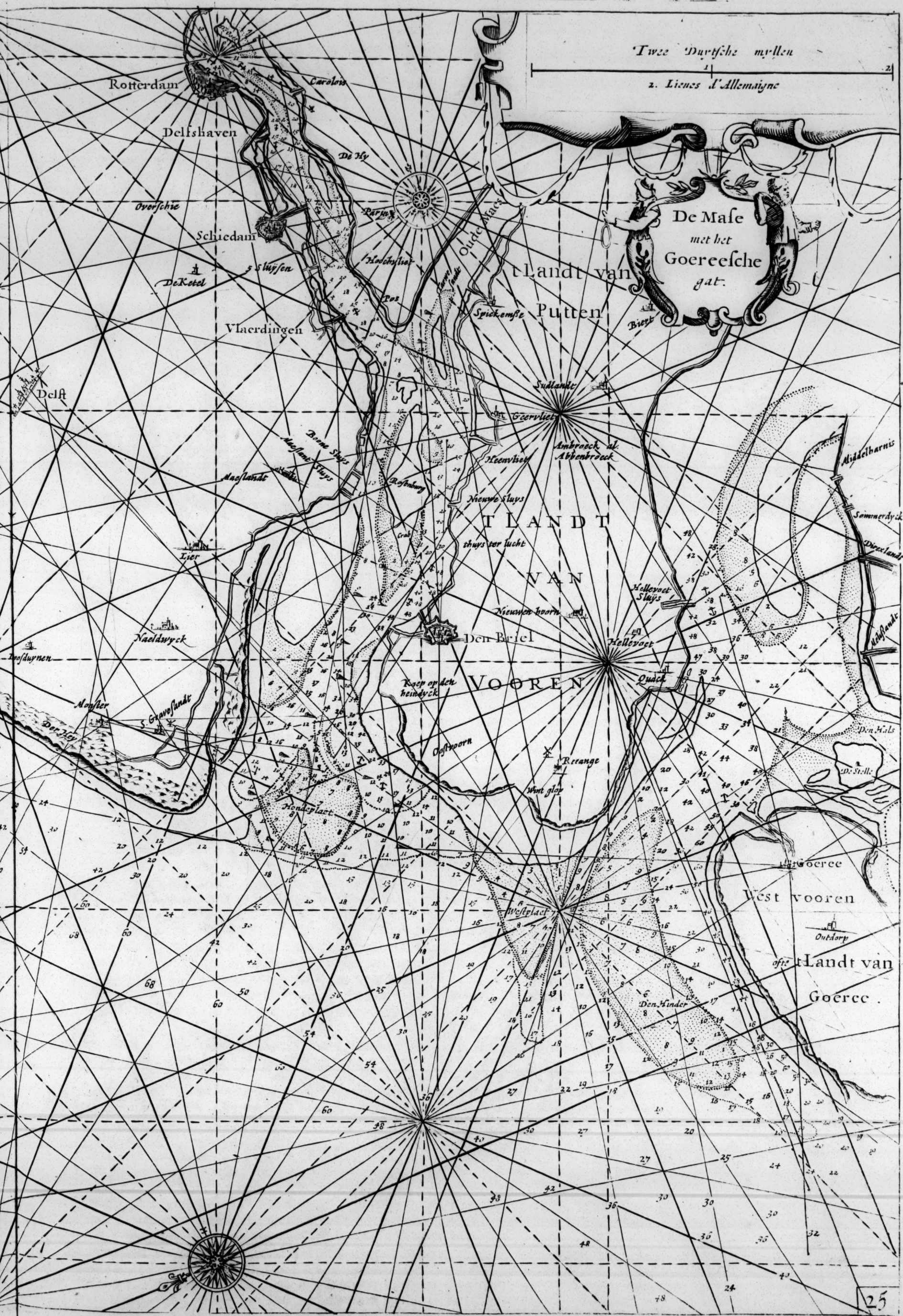
Le Fleuve de Texel les
Trous de Marsdiep et
Goeree et ainsi la Meuse.

De
Tegelstroom
met de
Gaten van
Marsdiep.

Caerie vande Reede end Haven van
Medenblich noemen die Gemeende foru
Wieringer als vrisch vlack bezeyls
mogen toe dienst ende nut voor alle zee
varende luyden perseeleze gemete afge
ryke ende ghebrek 1614 vry speciale last
vande E. H. Burgemeesteren ende Reger
ders der vrye Stadt Medenblich

Duyghe mylen 15 in een graade
Eng. en fr. mylen 20 in een graade





W

Pampus

Marcks e
Enckhuys
senland.

The First part of the Firie Columnne.

THE FIRST BOOKE,

Of the

WESTERN NAVIGATION

Containg

*The description of the Zea-Coasts of Holland, Zealand, and
Flanders, from Tessel to the Heads off Dover off Calice.*

The first demonstration,

*Where in are deliniated the Tjessel-streame, and the Channell off the same, as also the
Mase, and the Channell off Goeree.*

Pampus

FOR to saile from Amsterdam to the Fall of Urck, you must keep the middle of the channell in sailing to Tyoor, and from thence over Pampus, with a shippe off greate draught, that draweth tenne foot or more, keepe Marcken church without to the land of Udam, called Schytdoeckshaven, so long untill that the steeple of Zuyderwouwe come past Kinnigherbuer, which are the houses half wayes betwixt Schiteldoeckshaven and Durgherdam, goe then towards the land east, untill that the New church off Amsterdam come aboute Durgherdam, keepe that so standing, untill that the church of Weesp become past the House or Castle at Muyen, so that it doe stand somewhat nearer to Muyen then to the House, keepe Weesp standing so untill that Edam come without the east end of Marken. In this farewaye it is a foote deeper, then if you sailed right through.

For to avoide Muyen sand: men were wont to bring the houses which were wonte to stand upon Tyoor to the southwards of the Heylighersee at Amsterdam, thereby you can make some reckoning, they are good longst markes: when Monnickedam is aboute the west end of Schytdoeckshaven, and the house at Muyen betwixt Weesp & the Church at Muyen, then are you thwart of Muyen sand. For to saile right through over Pampus, then keepe the steeple of Diemen over or aboute the pointe of Tyoor, so lang as you can see Tyoor, that is a right longst marke for to saile over Pampus.

When you are come thwart of the east ende of Marcken, goe then on northaest, or somewhat more easterly towards the Fall of Urck, which is seven leagues, when you are come within a great league of Urck, you shall meete with a hard sand, called the Houtribbe, lying south east and northwest thwart over the Farewaye, there is no more water upon it, then upon the Flat off wieringen, or of Freeland, you shall finde also no deeper water there then right through. When Enchuyfen lieth northwest and northwest and by west from you, then you are upon the Houdtribbe. Before that you come against the sand, you can by night see the fire upon Urck. When that Urck or the fire is more northerly then northeast from you, and that you get shoulding, then that is certainly of the Houtribbe: for so you cannot come to near the Enchuyfen sand. When you come from the southwards, you are not about the Enchuyfen sand before that the Church upon Urck come without the litle village of houses, which is then east and by south and east southeast from you: if that then you goe awaie northwest and by west or westnorthwest, you shall runne close alongst by the side of the sand. With a ship of great draught, bring the church a good wayes through the houses, untill that it stande eastsoutheast from you, then goe bouldly on norhwest and by west, or keepe Medenblick without the point of the Ven, and so you shall not come to near, neither to sand nor shoulde. Likewise if you come from the north wards, and bring Urck not more easterly then southeast from you, then you cannot take hurt also of the Enckhuysen sand. From Urck to the buyes upon the Cripple and Hofftede, the course is northwest & by west, with that course you may runne all alongst unto the southerbuye upon Wieringen flat: in turning to windwards you may wel bring Medenblick a litle within the point of the Ven, but when Medenblick is without it, then you are in the right farewaye.

Marcks of
Enckhuysen
sand.

From the Buye upon the Crippell, which lieth upon the east end off the Cripple-sand three fathom, unto the beakon upon Cripple-sand, the course is northwest and by West, and northwest. When Lutkebrooke, and small spire steeple cometh to Hem (which is also a spire steeple) then are you thwart off that beakon. From the beakon upon the Cripple, unto the souther buye upon Wieringer flat, the course is northwest and by West, or Westnorthwest, according as the Wind and tyde shall bee, it lieth at high water with an ordinary tyde, in thirteene foot and a halfe, the markes thereof are these: Greatebroocke commeth betwixt two Hay-stacks to the eastwards of the five Water-mills which stand to the eastwards of Warvers hoof, that is a long marcke in the S. Twisch a sharpe steeple to the Westward of Medenblick, commeth over Almerdorp, there was wont to bee a litle flat steeple, but it is fallen downe, and therefore now not so good to be knowne, that was a right thwart marke. Vpon Wieringer standeth a cape, bring Eastlander steeple which is a flat steeple upon Wieringen, right over the cape, and saile soo right with it, and you shall come right with the buy. When you are at the buy, Westlander Church commeth then over Cleversee, and the eight miles to the eastwards of Medenblick, a litle without the Towne. For to finde the deepest of the flat comming from the Cripple, you must bee carefull to looke out for the foresaid markes. If that Twisch come first to Almerdorp, before Cleversee come to westlander Church, then you are to neare to Breesand, or the grounds on the starboard side, these are sure markes for to saile over the flats, when there lie no buyes. Alongst to the eastwards of the buye is the deepest water. If you will anckor before the Wieringer flat, then come no nearer the Flat then when Twisch commeth a litle to the Northwards of Opperdoes, or halfe wayes betwixt Opperdoes and Almerdorp.

Markes off
the beakon
upon Cripe
ple sand,

Markes off
the sou-
ther buy
upon the
Flat.

For to saile from the foresaid souther buy over the Gammels to Medenblick, you must bring the westermost watermill of the eight (which stand to the eastwards off Medenblick) a capstone barres lengt without or to the eastwards of the Bulwarke off thee Towne, and sayle then boldly without feare right in with them, untill that you come into the road where the ships commonly lye, or else, if you desire to goe into the Haven, then saile in right to the northerhead, there is nothing that can hurt you. But if you must turne to windwards over the Gammels, and that your ship draweth more then eleven foot water, then runne not further over to the westwards, then that the foresaid Watermill commeth almost within, or a hand spikes lengh to the foresaid Bulwark, so that yet you may well see through betwixt them, then cast about, and run over to the eastwards, so long untill Greatebrooke come in the five water milles, which stand to the eastwards of Warmerhoof, or on to the eastwards of them, soo you shall not doe amisse, for it is there broad and wide.

For to sail
over the
Gammels
to Meden-
blick,

If you desire to saile over the Gammels to Medenblick, when you come from the Flye, then bring the steeple off Opperdoes over the westermost Water-mill off five, which stand to the westwards of Medenblick, and runne in so right with them, untill that the westermost watermill off eight (to the eastwards off Medenblick) come to stand a capstone barres lengh without the Bulwark, as here before once already hath been said. Having these marks thus, and that it doe become

darke, then goe on south and south and by east, according as the wind and tyde shall be, and you shall not doe amisse, neither shall you misse the Town. In this foresaid faire way, there no lesse depth then upon the Wieringer flat, and all soft ground.

When the steeple of Twisch is over the westermost water-mill except one of the five which stand to the westwards or Medenblick, and Grootebroek, in the litle village, to the eastwards of the five watermills on the Easterdyke; then are you in 13 foot from the northwest point of the Cripple, and past the taile of the Cripple. Upon these foresaid markes, and 13 foot, lieth a buye with three legges, and on the foresaid west shoare lie three drift-beacons in 12 foot, and then commeth the westermost water-mill (of the eight which stand to the eastwards of Medenblick) and so you shall not have lesse water then upon the Wieringer flat.

For to sail
over the
wieringer
flat.

From the Souther buye to the second or middle buye, the course is northwest and northwest and by north: but for to find the deepest water, goe first northwest so long untill that Ypels-hoofs Church come over the watermill, which is called the Bolmill, and then forth n. w. and by n. When the Cornmill upon Wieringen commeth in the swamp off the Oever, then you have the length of the second Buye, which lieth upon the west, or the south end of a little plate, called the Repell, the faire way is alongst to the westwards of it, there being at low water two fathom large, and at high water scarce three fathom deep. On the west side of the fayre way, betwixt the foutherbuye, and the middlebuye, nearest the middlebuy, lieth a hard sand called the Sow, or the old Sow, which on the east side is very steepe and needle to which (in sailing up) men might saile within a point or a tayle of it: to the westwards off it shooteth off another taile to the northwards, a great wayes towards the northeast buye. Upon the outermost, or northermost point, called Senghoort, standeth allwayes a beakon. Upon Wieringer upon the Oever stand two litle capes with barrels on them, the one upon the Northend off the Oever, and the other upon the head, they are so litle, that you can hardly see them: when you come off from the southerbuye towards the middle buye, then keepe them not one in the other, for if you keepe them one in the other, then you will bee very close by the south shoare, & shall but even run cleare of the old Sow, but keepe the southermost a litle to the westwards of the northermost, and then you shall run alongst the right fareway, and shall not take any hart off the old Sou. When you come neare the middlebuy, you must leave these marks and use them then no longer.

From the middle buye into the Northerbuye, the course is northnorthwest, When you come thwart off the northerbuye, then commeth Oostlander Church and the Cornmill, both over a litle Chappell covered with red tiles, that stand upon the Oever, thwart off it also standeth the foresaid beakon upon Senghoort. By the Northerbuye it is scarce three fathom deepe at high water, the fareway is alongst to the westwards off it. When you come by the norther buye, keepe still the foresaid northnorthwest course, untill that Oostlander Church come to the northwards of the Sedge dyke of the Oever, and then you are past the litle plate which lieth by the northerbuye.

When as that Oostlander Church commeth from the Sedgedyke, goe then north, and north and by east on, to the Nefse. In that fareway it is broad and wide, the west shoare all alongst unto the Nefse, is very flat, there you cannot take any hurt, but may boldly runne alongst by it, although it were a lee shoare, but the east shoare is steepe, especially somewhat further out towards Jaep vaer. When the great Cape from Wieringen standeth a great shippes length to the eastwards of the houses upon the Oever, then you are well to waye; and right in the fareway betwixt the northerbuye and the Nefse.

The Nefse.

When Ypels-hoof and Stru are one in the other, there is the roade, where men doe lade and unlade, you may anchor thereabouts in the middest off the fareway in foure fathom, the nearer the east shoare the deeper. Jaepvaer is a tayle off sand or plate fast to the east shoare, which you might saile within when you saile off, but specially in sailing upwards in six or seven fathom, upon it lieth a blacke buye. Upon the point off the Nefse over against Jaep-vaer lieth a white buye, these lye both in three fathom, or three fathom and a halfe. In the winter, when the buyes are taken away, then in place off the white buye there is set a beakon upon the Nefse. From the Nefse to Vogel-sand, the course is most northwest, therefore when you have gotten the length of the buye or the beakon upon the Nefse, goe then more westerly, northnorthwest, and northwest and by north and northwest,

Jaepvaer.

unto the Beakon upon Voghel sand, the west shoare you may find in six and seven fathom. The markes off this reach are these, the Mill of Ooster-end (which is a litle Village upon the east end off Tessel) and the Cape which standeth upon the dyke, one in the other, then are you amidst the Channell in the deepe, that is, tenne, eleven, and twelve fathom; when the mill standeth somewhat to southwards, or to the westwards of the Cape, then are you by the south shoare, which is very steepe, which (in turning to windwards) you may not come neare then in eight or nine fathom, but being past Voghel-sand, it groweth showlder, and the east shoare very steepe: As soone as you finde that it beginneth to showld, you must cast about, else you should presently be on against the east shoare.

From the beakon upon Voghell sand, the course is west-northwest unto the buye upon Burgsand, which lieth upon the taile off the Share, the markes off it are: the Eyerland even unto the east point of the Island Tessel, and the Church off the Horne upon Tessel too Zuyd-haffel, which is a few houses to the northwards off the Schtonce. Or else when you come about Voghell sand, then keepe the foresaid cape and mill one in the other, untill that the foresaid Horn come to, or through Zuyd haffel, and then run on, keeping them so when that Eyerland commeth even to the east point off Tessel, then you have the length of the buye upon the Burgsand, you may bring the Horne well somewhat to the northwards of Zuyd-haffel, but in no wise to the southwards of it, for else you should saile on against the south shoare. For to saile from thence to Copevaerders roade, you must keepe the Horne to Zuydhaffel, and saile forth keeping them so, untill you come against Tessel in the roade, and anchor there where you thinke good. Before Oosterend it is best for small ships, there it is should water, and there goeth litle tide, but most ships doe anchor before the Geest.

Vpon the point of the Bosse lieth a white buy in three fathom on the west point off the Balgh, which you must leave on the starboard side, & run about to the eastwards off it into the Balgh, and then forth alongst by the beacons to Wieringen, you must leave all the beacons also on the starboard side.

For to saile from the Copevaerders roade out at the Tessel, you must goe first southwest or somewhat westerly to the Helder, or run alongst by the Tessel side in 9 or 10 fathom, untill you come neare the Helder, and then goe out west close alongst by the shore off the Helder, and by litle and litle somewhat more northerly, untill that the capes upon Huyf-down be one in the other, or that the greatest come through the smallest, to wit, to the westwards off it, and then goe on N. N. W. or more northerly or westerly, according as the wind or tyde shall be, untill you come against the northshoare, in 5 or 6 fathom, and run boldly out alongst by it, untill you be cleare out at sea.

When the tower off Wester-end (which men do name the Westen, or the Wambuys) commeth to be E. N. E. from you, or a litle more easterly, then you have the length of Cape and steeples buy, that is, the innermost buy of the Spaniards channell, which you shall espie on the larboard side. To the northward of it lie three other buyes, all alongst the E. side off the Keyfers-plate, neare upon one course, (to wit, N. N. W. or a litle more northerly) which you must leave (in sailing out) all on the larboard side. The outermost buie lieth from the fourth north somewhat easterly upon the point off the Keyfers plate, in 22 foot at low water, you may run alongst to the westwards of it, but not far, for the Keyfersplate is on the east side unto the outermost end very steepe, but the east shoare off the deepe it is flat. When you come thwart of the foresaid outermost buye then lieth the Kooger Church right E. N. E. from you, and the capes upon Huyf-down are one in the other.

For to finde the Spaniards Channell comming from the northwards, you must bring the Capes upon Huyf-downe one in the other, or a litle through one another, to wit, the Runner that is the southermost and greatest, a litle to the eastwards of the other, then they shall stand S. S. E. from you, saile then right in with them, keeping them so, and you shall saile right upon the outermost buye, or in sight of it, which lieth (as is said) upon the point off the Keyfers-plate in 22 foot at low water: when you come to the buye, the Koger Church shall lie due eastnortheast from you.

Therefore if you come from the westwards or the southwards, then bring that Church not more northerly then e. e. e. but rather a litle more easterly from you, and saile then right in with it, untill that the Capes come one right against another, or else you should lightly saile upon the Keyfers-plate, which is without upon the North-side very steepe.

Men

For to say
in at the
Spaniards
channell.

The Land
deep.

Men may runne along to the westward of the outermost buy, but not far: alongst to the eastwards off it, is broader and wider.

From the first or the outermost buye, to the second, the course is south, somewhat westerly, and from thence to the third, fourth, and fifth, which is the buye of the Cape and steeple, it is almost one course, southsoutheast, or somewhat southerly, the buyes lie all on the west shoare, men may for need saile alongst to the westwards of them, but not farre, for the west shoare is so steepe, that if a great shippe should lye with the stemme against it, there should be a head no more then 3 foot, and by the main mast at least 3 fathom deepe, but the east shoare is flat, men may runne alongst by it upon you lead, untill they come within the buyes. The buye upon the tayle, that is, the innermost buye of the Slenck, lieth from the buye upon Cape and steeple, south and by west, and S. S. west, but the Helder southeast. Men may saile from the buye upon Cape and steeple, right with the Helder, without danger, or to the buye upon the tayle, and from thence alongst by the fourth shore, which is also very steepe, or eight to the Helder, according as shall be best convenient for the wind and tyde. The foreflood falleth very strong over the south ground north northeast to the Spaniards channell; untill half flood, and the fore ebbe to contrary south southeast, untill halfe ebbe. The Helder lieth from the buye upon the tayle, east southeast, and southeast and by east. When you are come near the Helder, run close alongst by it, for to avoid a tayle which shooteth off from Geest sand, which you might saile within when you come in out of the sea, there lieth a Buye upon it which you must leave on the Larboard side. Being past the Helder, goe northeast, or somewhat more easterly, or alongst by the Tefells side in eight or nine fathom, unto the Copevaerders road the Wieringhen side is steep.

The Slenck In the Slenck lie 6 Buys, the innermost lieth upon the tayl of the Keyfers plate, west northwest from the Helder. For to saile out at the Slenck, you must run alongst to the southwards of it, and leave it on the starboard side, and go out west, and west and by south, to the second and third Buy, from the third to the fourth and fifth west southwest, the sixth or outermost lieth a litle more southerly.

For to finde the Slenck comming in out off the sea, then bring the Cape upon the Iland Tefell, and the Westen, (that is the steeple off Westeynder Church, which men doe also name the Wambus) one in the other, then they shall stand a litle more northerly then east northeast from you, sayle in so right with them, and you shall run in sight off the outermost Buy, which lieth from the Kyckdown west northwest, and west from the Helder. If you come from the northwards or the westwards, & will go in at Slenck, then bring the kyckdown east southeast from you, or the great Cape upon Huysdown in a litle valley a litle to the northwards of the kyckdown, to wit, betwixt the kyckdown and Cape Neles house, saile then so right in with them, untill that the Cape upon Tefell and the Westen are one in the other, then you have the length off the outermost buy, and shall not misse to meet with it, which lieth in 4 fathom and a halfe at high water, and in a quarter lesse then 4 fathom at a low water, keep that Cape and steeple one in the other, and saile in so right with them all alongst untill past the third Buy, which lie all, (like as also the fourth and fifth) in the midst off the fareway, but alongst to the southwards off it is deepest, the south shore is very steep, so that having one cast 4 fathom and a half, the next cast you shall have but three fathom, but the west shore is flat going up. The fourth Buy lieth from the third east northeast, or somewhat more easterly: the fourth and fifth, east and by north. The fifth and sixth east and by north, and east northeast. The second Buy lieth at low water 20; or 21 foot, upon the showdest of the Slenck: the other Buyes lie in foure fathom at low water, but the sixth, or innermost, in 3 fathom upon the point of the tayle, which you may not saile about to the northward off it: but must leave it on the Larboard side in sailing in. But you must reckon your tydes well. The foreflood falleth north northeast, thwart over this channell, and the south ground, untill halfe flood, and to the contrary the fore-ebbe south southeast, until halfe-ebbe.

Within the sixth Buy it is broad and wide, and mee saile in from thence right to the Helder east southeast.

The Land deep. For to saile out at the Land-deepe, then run alongst within a bow-shot of the foot strand of Huysdown, and about by the heads, and you shall not misse the innermost Buy, which lieth upon the showlds, nearest the west shore in seventeen foot at high water, and thirteen foot at low water, that shouldy place is not above two shippes lengths broad, over it,

and also within it, it is deep enough. Thwart of that Buy shooteth off a litle tayle from the shoare towards the Buy, therefore runne close alongst by the Buy, and leave it on the starboard side of you in sailing out. Besides that Buy, there lye 3 other Buys in the Land-deep, which you must leave all lying to seawards of you, and run through betwixt them and the shore, when you are come past the 4 Buy, you shall be past all the shoulds, and you may set your course that way that you desire to be.

For to finde the Land-deep comming out of the sea from the southwards, you must take the foundingh of the shore in foure fathom and a halfe, and runne so alongst by the shore, and you shall saile right with the outermost buye; and doing so, come no neare the shoare, or els you should saile within the taile of Arrian Bergers Creeck, which shooteth of to seawards from the shoare, to the southwards of the south-sand-hill. Or els if you come out of the sea with an open winde, then sed and keepe the great Cape upon Huysdowne, over Dirckoems Sand-hill, (that is, a round Sand-hill a litle to the southwards of the Kyckdowne, but not so high) and saile so in right with it, you shall not misse to meet with the outermost buye, which lieth at low Water in foure fathom and a halfe nearest to the Wester-grounds, or to the hakes, leave it on the larboard side, and runne in alongst to the eastwards of it, through betwixt it and the shore, it lieth most northeast, and northeast and by north in, you cannot lightly take hurt on neither off both sides, if you doe but take heed to keep you from the shoare. Thwart of the Kyckdowne, or comming to the southwards of it, you must edge a litle of from the shoare, for to avoyd a showld which lieth thereabouts, somewhat of from the shoare. When you come to the second buye, then commeth the mill to the Northwards off the kyckdowne, and at the third, the mill and Cane Neles house come one in the other, which two buyes lye both in five fathom at low water. From the third to the innermost buye, it is northeast and by east, run close along to the eastward off it, for to avoyd the foresaid litle tayle of sand, which (thwart of it) lieth off from the shoare, and then forth within a bow shot about by the heads, and so along by the strand of the Helder. For to sail up from the Helder towards the Whieringe-flat, you must goe northeast, or somewhat more easterly, according as the wind and tyde shall be, or else in eight or nine fathom alongst by the Tefell, untill that the Hoorn come to the northwards of Zuydhaffel, but take heed of the Whieringhen side, which is so steepe there, that you may have twelve or thirteene fathom at one cast, and should be a ground before you should be able to heave the lead againe.

When that the Hoorne commeth then to Northwards off zuyd-haffel, then keep them so standing, and sayle up so to the Voghel-sand, when that the Eyrland commeth even without the east point of Tefell, then you have the length of the buye upon Burghsand, which lieth on the southshore, Burghsand upon a tayle of sand, which men may saile within a five or fixe fathom. From that Buye upon Burghsand, it is E. S. E. to the beakon upon Voghel-sand, but saile upon the foresaid marckes of the Hoorn and zuyd-haffel, so long untill that you have the Cape upon Tefell, and the mill of Ooster-end one in the other, then keep men one in the other leaving the first markes, and sail up so unto the buye or Beakon upon the Nefse, and so you shall run amidst the channell in the fareway which is 10, 11, and 12 fathom deep. If you bring the mill a litle to the Westwards off the Cape then you shall be close by the south shoare, which is so steepe, that you may not come neare it, in turning to windwards, then in eight or nine fathom. Being come about the nefse, then go on south and south and west, towards the buy upon flat.

Tefell is a long plaine Iland, whereupon stand 4 Churches, the westernmost hath a high sharpe steeple, and is called West-end, or S. Johns, but by the Pilots if is called the Westen, or the Wambus. To the southwards of that stand an other sharp steeple, called the Hoorn. The three is called the Burgh, which standeth somewhat more to the northwards then the other two before said. The fourth is called the Oogh, or the Koogh, which is the northernmost of them all, without steeple, and is covered with blew flates.

The Eyerland lieth close to the eastwards, or to the northwards off the Tefell, and fast to it, when it floweth somewhat high, it is divided off from the Tefell by the sea, and made to an Iland: it sheweth it selfe off at sea like a low plaine litle Iland with little hommocks, there standeth upon it no more then a litle houses.

Huysdow is a short point off land with some white sand-hills, wheren the greatest and highest is called the kyck-downe,

Arrian Bergers Creeck,

The Nefse!

Eyerland.

downe, or Kykersdowne, the next to the southwards of it, is called Dirckooms sandhil, further to the southwards, they run flat off by litle and litle; and at length to nothing in a flat plaine strand. Upon the east end, called the Helder, lye also some sandy hills, betwixt the Helder and the kyckdown it is a most flat strand, with some sandy hills like a dike, upon which (about halfe way betwixt both) standeth the litle or the outermost cape, the gear cape standeth somewhat within the land, about east from the kyckdown.

Huyfdowne, or the Marfdeep and the Maes lie south Z. W. somewhat southerly, and north northeast somewhat northerly about 24 leagues a funder. From Huyfdown to Petten the coast lieth south and by west foure leagues. Petten hath a litle Church with a litle steeple, and thereabouts you shall see two other litle sharpe steeples in the Northland. A litle to the southwards of Petten lieth the Hondbosch, a league to the southwards off Petten lieth Camperdowne, the best land to be known thereabouts, the north end is a high steep white sand-hill, which goeth sloping downe: the southermost part is gray and rough, beingh grown over with head, or spyrie grasse, to the southwards off it lie many rough hommokes or sand-hills, where sometimes you shall see amongst them a white spot, so that it is very good to be known. From Petten to Egmont upon the sea, it is three leagues. Egmont upon the sea is also very good to be known, for it hath a thick flat steeple, which standeth like a faile in the sand-hill, and a litle to the southwards off it you may see Egmont within, which hath two high steeples upon the Abbey, close one to the other, where off the one is sharpe, and the other (to wit, the northermost) is flat, because the spire is lately falne downe. A litle to the northwards off the Abbey standeth another steeple off the church upon the old walls, but it is not so high as that upon the Abbey: so that upon all the coast of Holland, there is no place so good to be known as this. From Egmont upon the Sea, to Wyck upon the sea, are 3 leagues, that is also a flat steeple: when you are thwart off Wyck upon the sea, you may see Beverwyck a litle to the northwards off it, which is a high, thick, and sharp steeple; besides that, you may see also betwixt Egmont and Wyck upon the Sea Castricom, and more other sharp steeples. From Wyck upon the sea to Sandfort, it is three leagues. Sandfort hath a sharp steeple, with a high fire beakon, a litle to the southwards of it, in the black sandhill which sheweth it selfe also like a steeple.

To the northwards of Sandfort lieth a high white sand-hill, alongst over which you may see Harlem, high square crosse Church, which hath a high sharp steeple upon the midst off the Church, and also to the northwards off it a high small steeple (called Baekneffer steeple) thwart of it hath the coast of Holland a great Bay. From Sandfort to Northwyck upon the sea, are 3 leagues, that is a flat steeple, whereby standeth a fire beakon. To the northwards off Northwyck upon the sea, you may see Northwyck within, a flat steeple, whereupon standeth a litle cap not very high, and upon the midst off the Church standeth a litle small tower. From Northwyck to Catwyck upon the sea, it is a great league, being also a flat steeple, which in times past hath had a spire: to the southwards of it standeth a high fire beakon, to see to like a steeple: you may also see thereabouts within the land (when you are not very farre from the shore) Catwyck upon the Rhyne, and Rynsburgh and Valckenburgh, all sharpe steeples. From Catwyck to Schevelinghen are 3 leagues, the Quire of Scheveling Church is somewhat higher then the Church it selfe: in manner at the Hagues Church: a litle to the southwards off that Church standeth also a fire beakon. About halfe a league within the land, you may see the Church of the Hague, which is very good to be known, the Quire is higher then the body of the Church. The Hagues steeple you may see far above any other part of the land. From Scheveling to the Heyde it is 2 leagues, and from thence forth to Graveland, or to the north side off the Masse, one league. The Heyde is a village without a steeple: but a litle within the sand-hill, standeth a flat steeple, called Monfter. Graveland is a high sharp steeple, very good to be known, which standeth on the north side of the Masse. The Brill is a great flat steeple on the south side of the Maes. All this coast off Holland, from Huyfdown to the Maes, is altogether a clean strand, which men may come so neare to as they will, into 4 and 5 fathom.

Of the Maes and Goerees gat.

The Maes is now at this time but a wide or flat broad water with little altering of depth, whereupon you may saile by his winde. When as the winde is somewhat southerly, passe then

upon the old Markes, that is: (when you come out off the Sea) before you can see the Capes, set then the tower of the town of the Briel (which is a thicke and stump tower without any sharpnesse) east southeast from you, or somewhat easterly or southerly, upon condition so as you get the Capes in your eye-sight, bring the same then over against another, and runne thereupon, or if you bring the tower of the Briel a litle higher by north then the tower of Oostvoorn, and that you runne thereupon, you shall then, without faile runne upon the utmost tunne, which doth lye with low water upon 3 fathom.

From the utmost tunne untill the second and third tunne, you may saile stil upon the Capes. The second tunne lieth upon 13 and the third upon eleven foote, being there besides, then comes the tower of Goeree a litle upon the footstrand of the land of the Briel. The fourth tunne lyeth from the third almost upon the same course right upon the Capes, through somewhat southerly, betwixt these tunnes is the dryest of the Maes about ten foote, by the fourth tunne is it somewhat deeper, so that it is thereabout eleven foot deep with a common low water, but with a southerly or southeast winde runnes it somewhat lower. From the outside untill the fourth tunne is it roome and broad, so that you may goe there a reasonable depth. Besides the innermost Bakon, called Heydike, is it somewhat more narrow. The fifth tunne lyeth distant from the fourth eastnortheast, and northeast somewhat easterly. From the fourth untill the fifth tunne, by south along the tunnes, in the right fare-water, is it deepe 13, 15, 16, and 17 foot, and next unto the fifth tunne 5 fathom. The sixth tunne lyeth from the fifth, east and by north, upon 12 foot, all along there by south is it 5, and 6 fathom deepe, and is called the Pit. When you are past the sixth tunne, then comes Maselands-Ilse, and the tower of Vlaerdigen over against another, hold the same so standing, and runne thereupon, so long, untill you get the old Head of the Briel, in the New, you may runne then unto the land off the Briel, and so forth along the South-wall, untill you come before the Briel, where you may set it. He that will higher upon the Maes may runne forth all along the South-wall, untill he is past the new Slise, turn then againe to the north-wall. From the east-end off Rosenborough runnes off a Taile where you may saile upon, coming out off the west. If you bring not the tower of the Briel (when you are past the Heads off Black-wall) without or by north these Heads, but doe hold there by south, then you cannot saile there unto, but you must runne there along a good deale by south. Right by east Heen-vliet goeth the old Maes in, the flout falles therein very strong, whereof you must have a care, not to misleade your selfe upon the Tarw-sand, which is a great Sand-plate, and lieth before in the beginning of the midst off the old Maes, which doth fall with low water a great deale dry, and stretcheth with a long small point westward in the Maes. For to escape the same, have a care of divers Trees, which stand on the south-wall, somewhat by east of the Maes, hold then the tower off Rotterdam by north these Trees, then you shall not faile upon the Tarw-sand, but if you take this tower by south these Trees, you shall certainly come upon the aforesaid Taile. By north of the Tarw-sand goeth a depth in, whereupon you may saile in the old Maes unto Dordrecht, wherein also do lye two tunnes, he that will runne therein, goe upon the aforesaid markes of the tower of Rotterdam and the forenamed Trees, so long untill the tower of the Briel comes on a house off Pannes, which doth stand upon the southside off the east-end of Rosenborough, and keepe that so standing, then you shall not misse the tunne. When you are past the old Maes, sayle then in the midst off the water, till you are past Vlaerdigen unto the fifth Sluses, from thence you take the south-wall, and runne thereby close along, untill you are past a litle dry Bancke, where you have with low water eleven or eleven and an halfe foot water, coming close by the south-wall, it is deeper, stretching thwart over the Maes, so soone you are past the same, goe then right unto the Head off Schiedam, where you have the deepest water.

If you will goe to Delfs haven, then (being past Schiedam) keep the sounding off the north shore, and run alongst by it untill you come before the haven, and ankor there. But if you will saile to Rotterdam, then runne alongst by the N. shoare, so long untill that Overschie and the house of Spin come one in the other, then edge over, or a litle sooner unto the S. shore, and run alongst by it, or bring the steeple off Vlaerdigen (when you are past the head of Schiedam) over the third house upon the

Petten.

Egmont
upon the
sea.Wyck
upon the
sea.

Sandfort.

Northwyck

Catwyck.

Scheveling

The Hage

The Hey-
de.Monfter.
Graveland
The Brill.The old
maes.

Tarwland.

Quack
deep.

on the Schiedams head, and keep that so standing so long untill the head Charlois (whereupon standeth a litle wood off rtees) come one in the other, and so you shall leave on the larboard side, a litle should plate, that lieth about halfe wayes betwixt Schiedam and Delts-haven, & runne alongst to the S. wards of the should that lieth before the haven upon that foresaid plate remaineth no more then 7 foot water, and upon the should before the haven, but 2 or 3 foot water, & are both very steep. When the foresaid mill, and the head of Charlois come one in the other, then keepe them so standing untill that you come thwart of the new head of Rotterdam, saile then towards the Towne, and close alongst by it, in betwixt the Towne and the plate there you may anckor.

For to sayl into the souther channell of the mae. For to find the souther channell (comming in out off the sea) before you can see the capes, you must bring the steeple of the Brill (which is a thick flat steeple without any spire or sharp top upon it) E. S. E. from you, or somewhat more easterly or southerly, according as you get sight of the capes; then bring them one in the other, and run so right in with them, or els if you bring the steeple of the Brill a handspikes length to the northwards of Oostvoorn, and run so right in, you shall without faile run it sight of the outermost buye, which lyeth at low water in 3 fathom.

From the outermost buye to the second an third buye, you must saile yet right in with the cape; the second buye lieth in thirteen, and the third in eleven foot, being thwart of it, the steeple of Goeree commeth a litle upon the foot strand of the land of the Brill. The fourth buye lieth from the third, yet neere upon the course right in with the capes, but a litle more southerly. Betwixt these buyes is the showld of the Maes ten foot, by the fourth buye it beginneth againe to bee deeper, that lieth in eleven foot. From without unto the fourth buye, the channell is of a good bredth, so that you may turne into windwards a goodwayes on both sides off the buyes, and borrow off the shoares on both sides by your lead, but right alongst a litle to the southward of the buyes, is the perfect deepest water. The fift buye lieth from the fourth eastnortheast, & northeast & by east, on the north side of the deepe on the Honde plate in eleven foot, which you must leave on the larboard side, and run in about to the southwards off it. From the fourth to the fifth buye alongst to the southwards of the buyes, in the right fareway, it is deepe thirteen, fifteen, sixteen, and seventeen foot, and by the fift buye five fathom. The sixth buye lieth from the fifth east and by north in eleven foot and a halfe, also on the north shoare, or Hondeplate, along to the southwards of it, the channell is at the narrowest, and five and sixe fathom deepe, the south shoare is thereabouts very steepe, close to it, it is sixe, and sixe fathom and a halfe deepe. As soone as you come past the sixth buye, then commeth Maesland-slucce and the steeple of Vlaerdighen one in the other; keepe them so one in the other, and runne in so right with them, so long untill that you get the house of Lucht over Ambroeck, and then you shall run farre enough alongst to the northwards of the Polder, and by the side of the seventh buye, alongst in the right deepe; you shall finde in this fareway, foure fathom and a half, goe then towards the Brill, or upwards alongst where you desire to be, as is said here before in the description of the norther channell.

NOTE,

All these foresaid depths, and those which follow of the Goerees-gat, are set there (as also in the Carde) according to the lowest water off a common tyde, and it floweth there 6 foot up and downe.

The Goerees-gat.

Betwixt the land of the Brill and Goeree, goe in also two channells, the northermost is called the Quacksdeepe, and is not for great ships, but onely for smackes, and small shippes: the other is the Goerees-gat. Betwixt these two channells lieth a great plate, called the Hinder, which at low water is not deeper then five, sixe, and seven foot. To the northwards of it goeth in the Quacksdeepe, and to the southwards off it the Goereesgat.

For to finde the Quacksdeepe comming in out of the west, you must keepe the steeple of the Brill east from you, and run so in, untill that a great country house, (which you shall see stand alone a litle within the point off the Quacke) come to the southermost sand-hills off the sand of the Brill, which shall then stand neare about southeast from you, keep that then so standing, and runne so right in, untill that Oostvoorn come to the westermost or southermost sand hills, then runne in alongst by the strand somewhat more southerly, untill that Goeree come to the eastwards or within the sand hills, and

then you shall bee past the eastpoint of the Hinder, which the Pilots call the Buyen, runne then towards Goeree, or to the eastwards, to Hellevoots sluce, where you desire to be.

For to saile in at the Goerees-gat, you must bring the steeple of Goeree, and the Cape upon the land of Goeree, one in the other, and then they shall stand east and by south, and east southeast from you: or if you can not see the cape, then bring the steeples east and by south, or east southeast from you, according as you shall have the winde, saile in right with it, untill you come hard aboard the strand, and within and bauwles cast in alongst by it, east and by north, & east in, so long untill that the land doe fal away more to the southwards: thereabouts runneth off from the shoare a litle taile which men might saile within, in going out, but not in coming in, there you must edge a litle further off from the shoare, being past that, luffe up againe towards the shoare, or haven of Goeree, & anckor there before it, or els if you will run up to Hellevoot-slucce, then bring the mill which standeth to the westwards of Goeree, a litle to the northwards of the steeple of Goeree, keepe then so standing, & saile so up to Hellevoot-slucce, & you shall come neare the plate which lieth over against or to the southwards of Hellevoot-slucce.

When you saile it at the Goerees-gat with a bare southerly winde, & that you can not bring the cape & steeple one in the other, you may bring the steeple well e. f. east, or a great capstone bars length to the northwards of the cape, & then run over untill you come against the strand, and so you shall runne over the taile of the Hinder in 14 & 15 foot at low water, but when the cape & steeple are one in the other, you shall not have lesse then 19 or 20 foot. Being come over the taile of the Hinder, in the right deepe, it is 6, 7, & 8 fathom deepe, the neerer the strand the deeper water. A litle within the cape, or almost thwart of it, is the narrowest of the channel further in it is wider, on the n. side towards the Hinder, it is rising ground, but the south shoare alongst by the strand is very steepe.

Off the tydes and courses off the streams, about these foresayd places.

Vpon the Wieringer-flat maketh full sea a southeast or northwest moone. Before Tessel, in Coopvaeders road, an eastsoutheast, and westnorthwest moone.

Without the grounds or showlds of the Tessel, an east and west moone maketh the highest water, and in the entring of the Tessel, an east and by south, and west and by north moone: but the flood goeth a good while longer in. And likewise runneth the ebbe also longer out, then the lowest water. When the moon is south, or somewhat more westerly, it beginneth apparantly to flow without on the strand, and likewise upon the showlds.

The fore-flood, and the after-ebbe out of the Tessel, fall both one with the other n. n. e. thwart over the grounds and channels, and right out at the Spanjards channell, untill halfe flood: and to contrary, the fore-ebbe, with the after-flood fall right in at the Spanjards channell Southsoutheast over the fourth grounds, and thwart over the Slenck and the other channels, untill halfe ebbe. A litle while before half flood, the flood beginneth to runne right in at the channell, and againe a litle before half ebb, the ebbe beginneth to see right out at the channell. Therefore he that will sayle into the channels, must reckon his tydes very wel, wherein consisteth very much. Without before the channell in the sea, the tyde turneth about with the Sunne, so that when as a shippe doth lye at an anckor without the channels, and hath neither good nor hurt of the waves of the sea, it should have but a litle still water.

In the north sea the tyde falleth round, more then halfe tyde, upon the broad fourteens, it turneth about with the Sunne or the moone, and falleth but a quarter tyde right alongst the sea. Nearer the coast of Holland and Zealand, the tyde falleth (whether it be flood or ebbe) somewhat slopingh towards the land, but in the midt of the tyde, it falleth right alongst the sea, and in the last of the tyde, it setteth to seawards, towards the westwards or the northwards.

Betwixt the Mardeespe and the Maes in the fareway, the fore-flood commeth out of the north sea, and turneth about with the moone, falling towards the land northeast, and northeast and by north.

The Fishermen of the Maes say, that when they are out of sight of the land, they can perceive in calme weather by the turning about of the tyde, whether they be to the northwards or to the southwards of the Maes. Somewhats to the southwards of the Maes, the after-flood runneth about against the Sun, but to the northwards of the Maes, it turneth about with the Sunne untill the last quarter, and then it setteth towards the shore, or the coast next unto it. They say also, that alongst the coast of Holland, men have no helpe of the ebbe in turning to windwards towards the Maes, except they bee without sight off the land, because there goe no ebbs by the land, when the wind is to the southwards of the west.

Before the Maes a southwest and by west, and a northeast and by east moone maketh a high water.

Before the Brilla southwest and southwest and by south, and northeast, and northeast and by north moone.

Before the old Maes a S. w. and n. e. moone.

Before Rotterdam a S. w. and by w. and n. e. and by e. moone.

Before Dordrecht a westsouthwest moone.

In the Goerees-gat, & before Goeree, a S. w. & by S. & S. S. w. moon.

Before Hellevoot-slucce a S. w. and by south moone.

Betwixt the Mardeespe and the Maes in the fareway, the fore-flood commeth out of the north sea, and turneth about by little and little n. e. and n. e. and by north towards the land.

In the sea thwart of the places, (without sight of land) it is a point, or a point and a halfe later full sea, the further from the land the later.

Not very long after that the flood beginneth to goe without the Maes, it doth begin also to goe into the Maes, but the after-flood falleth strong in, and so likewise in the Goerees-gat. Close before the channels by the land, the tyde turneth about with the Sunne, so that when the after-flood falleth into the channels, it turneth to the southwards, and becommeth againe a runningh ebbe: the afterebbe falleth againe thwart of to seawards out of the channels.

The Tessel-streame, Texel.

Of the depths & groundes about these places.

Five or six leagues without the Tessel, lyeth the Broad fourteens, lying from thence N. east with a small tayle which lyeth about north from the Tessel, and N. w. from the Flye, to the southwards it runneth with the east side against Catwyck or Scheveling, but the west side lieth off at least 11 or 12 leagues thwart off seawards from Northwyck and Catwyck, it is a banck moit of fourteen fathom deep, in some places somewhat more or lesse. Betwixt it & the land it is againe 18 and 19, and to the northwards 20 fathom deep. when you come over it about the Tessel or the Flye, and come againe in 16 or 17 fathom towards the land, then you shall begin to see the land.

There runneth of to the southwards into the sea from the coast of Holland 3 smal banckes or ribbes, which are somewhat broad & shewd by the land, & run off sharp & deepe to the end, the first the fishermen call the Smal-eihhe, and begin neth a litle to the southwards off Egmont upon the sea: the second the wterrib thwart of wyck upon the sea: the third and southermost the Hard, a litle to the northwards of Santfoort.

The high steeples of Holland and west-Friesland, as Egmont-within, wyck upon the sea, Sandfoort and other more, men may see before they can see the sandhills five leagues without the land. in 14 or 15 fathom, that is upon the fourthend of the broad fourteens, but Camperdownes, and the sandhills, thwart of Haerlem, they may see before they can see some of the steeples. The steeples alongst the coast are moit of them flat, except Beverwyck, Schevelingen and Santfoort.

Before the Maes and Coeree men may see the land in 14, and 15 fathom.

Courses and distances.

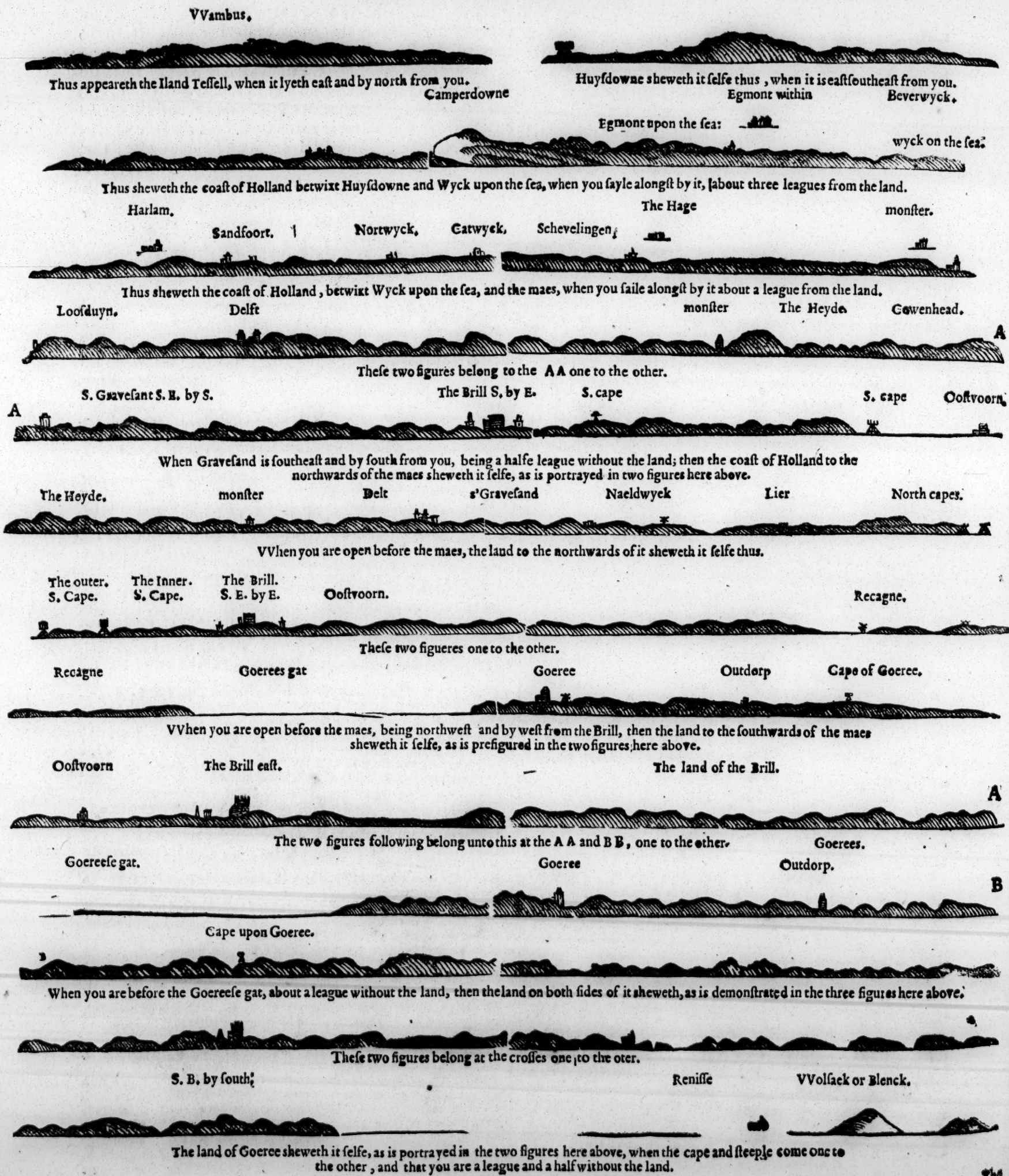
From Tessel to the Maes, S. S. w. 24 leagues

From Tessel to the Heads, or the Strait between Callis and Dover, S. W. somewhat southerly	53 leagues
From Tessel or Maridiep to Callis cliffe southwest and by south	51 leagues
From Tessel to the North foreland S. w.	48 leagues
From Tessel to Orfordnesse W. S. w.	37 leagues
From Tessel to Yarmouth west, and west and by south	33 leagues
From Tessel to the Shield, or Crommer west	40 leagues
From Tessel or Maridiep to Flambrough head westnorthwest	60 leagues
From the Maridiep to Lieth in Scotland N. w. and by w. somewhat northerly	100 leagues
From the Maridiep to New castle w. N. west somewhat northerly	83 leagues
From Tessel to Bocknesse northwest, and N. west and by north	217 leagues
From the Maridiep to Aberdine N. w, somewhat northerly	113 leagues
From the Maridiep to the Lieth of Berghen in Norway north	117 leagues
From the Maridiep to the north end of Hitland N. N. west	160 leagues
And then you shall fall about five leagues to the eastwards of the land.	
From the maridiep to the Naze north and by east	93 leagues
From the Maes or Goeree to Dover, southwest and by west somewhat easterly	35 leagues
From the Maes to the north Forland, westsouthwest westerly	32 leagues
From the Maes to the Naze, west	29 leagues
From the Maes to Hitland northnorthwest	180 leagues

Heights.

The maridiep lieth in three and fifty degrees, sayle out of the north sea, (being in that height) east on, and you shall fall right with it. The north side of the Maes lieth in 52 degrees.

How these Lands doe show themselves at Sea.



A

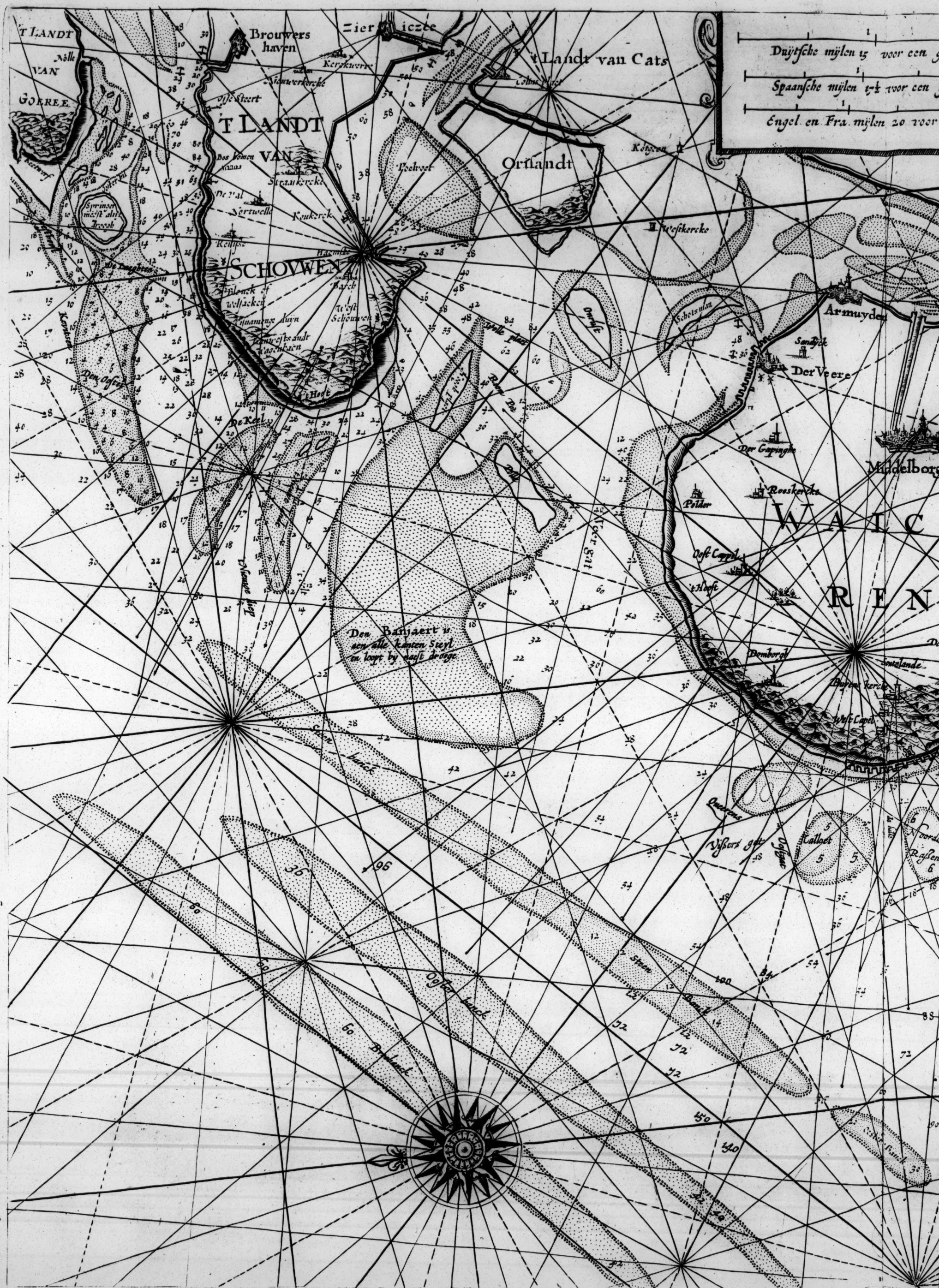
rn

A

A

B

The



Duytsche mijlen 15 voor een
Spaansche mijlen 12 voor een
Engel en Fra. mijlen 20 voor een

voor een graadt 2
 voor een graadt 3
 voor een graadt 4
 20 voor een graadt. 3
 20 voor een graadt. 4
 20 voor een graadt. 5

Lieues d'Allemagne 12 en un degre

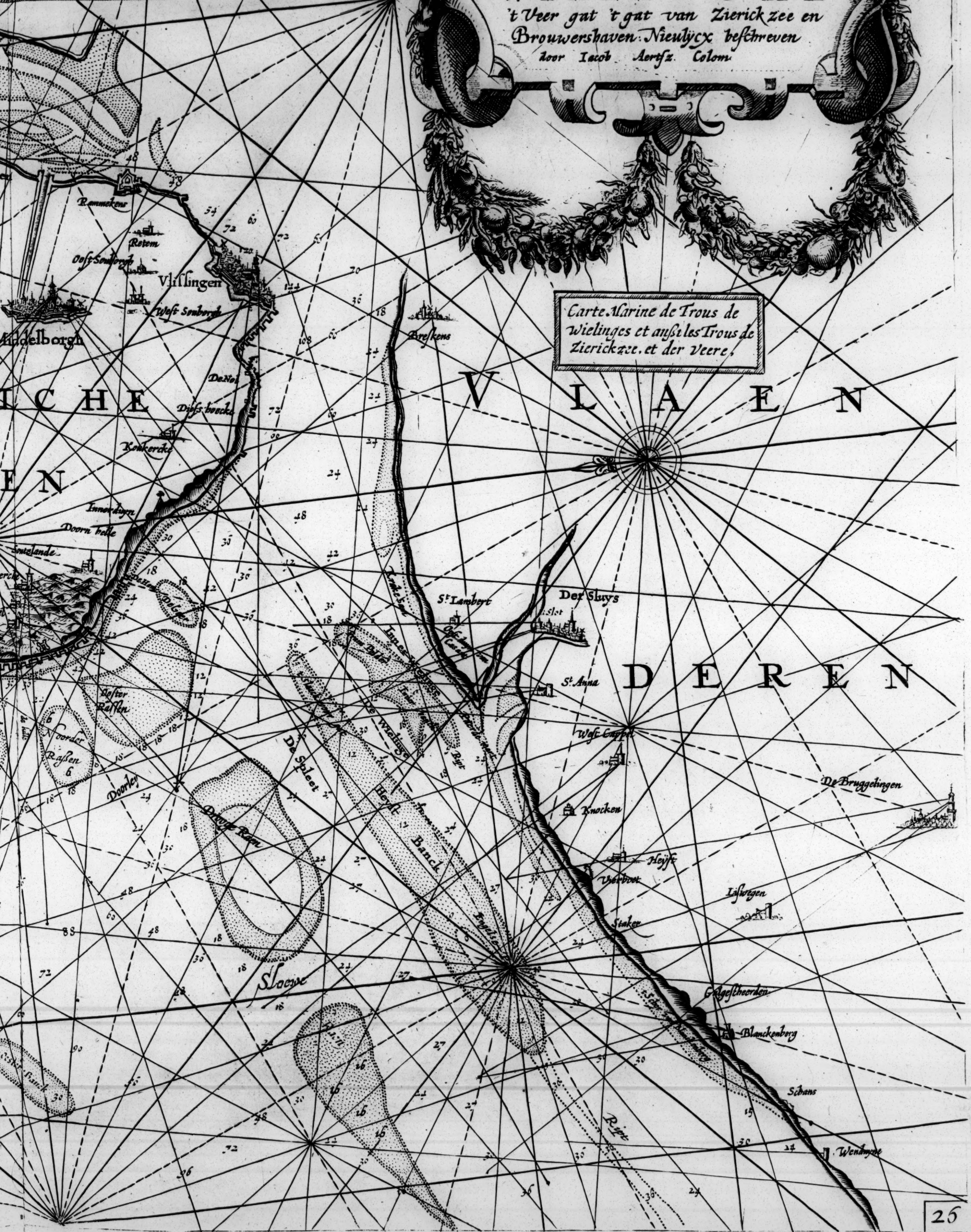
Lieues d'Espagne 12 en un degre

Lieues Angl. et Franc. 20 en un degre

Pascaarte vande WIELINGHE

't Veer gat 't gat van Zierick zee en
 Brouwershaven. Nieuwlycx beschreven
 door Jacob Aertsz. Colom.

Carte Marine de Trous de
 Wielinghe et aus les Trous de
 Zierickzee. et der Veere.



Reviser

Renid
VVolfa

The second demonstration,

Wherein are sheweth the Channells off Brewers-haven, Sierick-sea, the Vere, as also the channels off Zealand, in the Whilking.

7



Et wixt the land of Goeree and Schowen, there goe in also two channels, the northernmost is called the Kevitsen (which is onely for small ships) the southernmost for great ships is called the Brewers-havens channell. Betwixt them lyeth a great dry-sand, called the Springer, which floweth not under, but with very high floods.

Kevitsen.

For to finde the Kevitsen, you must bring the steeple off Ziericksea southeast and by south, or a litle more southerly from you; and then you shall espy upon the land of Schowen, about the steeple of Ziericksea, a wood of trees, bring that and the foresaid steeple of Ziericksea one in the other, and runne so right untill you come against the sand, so should or neare as you can, and then you run farre enough alongst to the Westwards of the west head. When you come within the west head, against the sand on the south side, then goe in east alongst by the foresaid dry sand the Springer, at the end of the afore-said dry sand shooteth off also a point under water, the which you must sound for: being past that, runne then directly with Brewers-Haven, as is shewed in the Card. In this channell it is upon the shouldest ten foot deep.

The Brewers Haven.

Before the land of Schowen thwart of the Brewers haven channell, lye three banckes, the outermost, called the Bre-bancke, lieth a kenning without the land, upon which it is 7 fathom deep, and again within it 19 fathom deep, upon the second nearer the shoare, it is five fathom deepe, and againe within it 7 fathom deep; the third called the Ooster, lieth close by the Land, and runneth into the eastwards, betwixt Schowen and the land of Goeree, upon it is no more then six foot Water, when you will saile into the Channell of Breuwers-haven, you must goe about to the Westwards of it.

Renisse
Volfack.

Upon the west end off Schowen stand two Capes, bring them one in the other, and runne so right in with them, untill the steeple of the Renisse (which steeple is somewhat sharpe) come to the Blenck or Wolsack, that is, a high white sand-hill, (which sheweth it selfe out in whiteneffe high above all the other Sand-hills) then leave the Capes, and runne in by the marcks of the Blencke and Renisse, untill that Outdorp, (a litle white steeple upon the Land of Goeree) come to the steeple of Goeree, and so you shall go in betwixt the Ooster of the larboard side, and the Hill on the starboard side, and alongst a litle to the southwards off the outermost buye, untill you come within the Ooster. When that Outdorp and Goeree are one in the other, then leave also the foresaid marckes of Renisse, and runne in right with Goeree, untill that you come by the second buye, or (if there lye no buyes) untill that the Bom-mencee come a litle without the Oxetayle, that is a point off Schowe, lying out a litle to the Westwards of Brewers-haven, saile so right in untill you bee past the Brewers-haven. This Channell off Brewers-haven, is a broad and deepe Channell, very convenient for great ships, he that must turn in or out to windwards, may runne alongst a good wayes on both sides, as well of the outermost as of the second buye, but to the southwards off them it is deepest, and the common fareway. The third buye is a buye with a tayle, and lieth upon a point off a taile which off from the Ooster, which you may not goe to the northwards off, untill it were very close alongst by it: all alongst by the strand of Schowen, it is deepe and steepe, you may runne close bit it from the outermost buye unto Brewers-Haven, there is nothing that can hurt you, the shouldest off this Channell is eighteen or nineteene foot, at least a league without the land in the comming in betwixt the Ooster and the Hill. Further inwards it is foure, five, six, and seven, and at some places ten and eleven fathom, as it is shewed in the Card by the numbers of Feet, and all at low water.

The Keel, the Newdeep, the Velt, and the Roompot.

Men may run into Ziericksea through divers Channells, through the Keel, the Newdeep, the Velt, and Roompot. For to saile through the Keele, then run in as is before said of the Channell of Brewerhaven first in by the marcks off the Blenck and Renisse, so long untill that Ter Veer come to the westernmost point of Schowen, called the Hoot, keepe them one in the other, or to the other, and run so in untill you come

by the strand, and then forth by it, and you shall find so in the Kell at the shouldest, 18 and 19 foot, & comming against the point of the Hoot, foure and five fathom. Betwixt the Hoot and the New-sand (which falleth at the east end at some places dry) run all alongst by the land of Schowen, untill you come thwart of the southernmost cape off Schowen, edge then somewhat off from the shoare towards the Baniard, for to avoid a Share which lieth off from Schowen, which you might saile within when you come out off the sea. There lieth a buye upon the point; whereby it is good to beknown: being past that, run all alongst by the shoare untill you come to Zierick-sea; somewhat within the buye, upon the point off the Share there is lately laid another litle buy for those that wil saile that wayes out, for that they may not saile upon the east side off the foresaid Share.

For to saile in at the New-deepe, you must looke out for ^{The New} two stone fire-beakons, standing a litle to the southwards off ^{deep.} the foresaid capes off the Channell of Brewers-haven, bring the innermost a handspikes length to the southwards off the outermost, and runne then right in with them, and then you shal runne in betwixt the Hill and the New-Sand in sixteene, 17, and eightene foot, go in alongst by the foresaid marckes, untill that you come by the strand, and then you come into the Keele. If you bring the fire beakons one in the other, and saile so right in, you shall then runne over the taile of the Hill in eleven or twelve foot. The Hill is a land somewhat flat, which men may come neare to the south side by thier lead, but the Newsand is very steep, and the sea breaketh very much upon it. When as that you come in by the strand into the Keel, then run in alongst by the strand, as is before said in the description of the Keel.

For to saile in at the Velt, you must observe these marks he- ^{The Velt} re under described: almost upon the southernmost end of Schowen standeth a Tower alone in the field, with a cape upon it, called Westschowen, bring that Tower a capstone barres length to the southwards off the foresaid southernmost cape off Westschowen and runne so right in, and then you shall runne through betwixt the Newsand and the Baniard, and shall finde upon the shouldest (thwart off the outermost point of the New-sand) twelve and fourteene foot; being past that, there will be againe fiteene, sixteen, and eighteen foot, and by the strand twenty foot deepe. When you come in by the strand, runne all alongst by it untill you come even to Ziericksea, as here before is said of the Keel, and Newdeepe. When you runne in at this channell; you must take very good heed of the Banjaerd, which is very steepe upon the north side; close to it, there is three, foure, and five fathom, but thwart of the foresaid strand, which lieth off from Schowen fixe and seven fathom deepe. The Newsand is indifferent flat on the sout side, that you may borrow of it by your lead.

Veer-gat.

He that will saile into the Veer-gat, comming out of the Sea, hold Middelborgh a ships length by west east-chappell; this is yet of the north-Cats, and when you doe see Sortgeen, hold it alwayes a ships-length more southerly then Cats, for the towers may not come over against each other, without comming to close by the Banjart, where of you must have a care, for the for a floud falleth there crossewise over a long the Banjart, which is a steepe, shallow, and very dangerous Sand.

For to saile out off the Veergat, you must have a care of the prison tower, which you may not bring by north the tower that stands at the head, or else you should come to fall upon the Plate which lieth over against the Leverhouse, for before the Lever-house is it verry narrow, and thereby runneth a kreke, through which the streame falleth strong, the ebbe as well as the floud, the ebbe towards Schouwen and the floud towards Walcheren; you must hold alwayes Gortgeen a ships length more southerly then Cats, then you doe come on the first Tunne, goe so forth from Tunne, to Tunne, till you doe come unto the third and last; you may doe no harme on the Land off Walcheren; about the Polder lieth a litle Plate, called the Scots-man, though there upon lyes a Tunne for a warning; the most depth is by south the runne, also with a sharp winde you must have a care off the Roompot, for the floud goeth very strong unto the Roompot, hold it all along close behind

behinde the land; it is there deepe enough, till Middelborgh comes in east chappell, goe then west-northwest in Sea, till without the Stonebench; comming out of the West, and that you will be into the Veergat, bring then Domborgh by east the watch-house of Domborgh, for to escape the Querens, hold then upon the land on, it is on the wall cleane and deepe, and you may runne there so close by as you please; these Querens doe lye within the Reuteel, and is with low water 4 fathom deepe; or if you doe come from Flushing out of the Botkille or Fishere-gat, or the Deurloy, or otherwise out of the west, doe not come then so close by the wall, when as you doe not see the watch-house of Domborgh, or make well upon the wood of Westhoven, & upon eastchappell: When as you can see through betwixt west-hoven and east-chappell then are you free of the Querens, geere then the wall free; betwixt these querens and the land, there runneth yet a land-deepe, but is very narrow, you must runne so close by the wall, that the land sea doth almost breake on you, it is not fit to runne with commonships through this place, except it were in time of great necessitie, for these Querens are very hard.

He that will take on these lands, must not spare his lead, for by the difference of the grounds he shall finde out whereabout hee shall come to fall, although he is without the sight of the Land.

If you doe come to fall before the Mase, you shall meete there a long flatnesse, which is deep 13 and 14 fathom, when as the Mase is southeast and southeast and by east from you, and it dreyeth up by litle and litle, yea by an halfe foot at once.

If you doe come to fall before Goeree then you shall meete no Bankes but some over falling, with great raveling, though they are reasonable deep, 13 and 14 fathom, and then is Goeree southeast and southeast and by east from you. Schouwen upon the wrong side that is Reinist by east the blenke, and the Cape east from you, and then are you open before the Brewer-havens gat, and also from the keele unto Ziericksea. Comming out of the Sea, and that you doe fall here, you shall meete then the Stonebanke upon 6 fathom, you may be sure thereby that you have Schouwen upon the wrong side, there by north doe meete no Bankes, and somewhat westerly you shall finde it to be dryer.

Comming out of the Sea, and that you come to fall thus: that Middelborgh is in east chappell or a litle there by east or there by west, you shall meete there 3 Bankes, first you doe meete Broad-banke, there you shall finde not lesser then 10 fathom water, but thereon within it is againe 20 fathom deepe, this Broad banke lieth about a mile from Stonebanke Seaward; The second is easterbanke, and it is there 6 and 7 fathom deepe, and doth lie betwixt Broadbanke and Stonebanke, though Broadbanke next, and stretcheth along these whole coast, and thereon within is it againe 17 and 18 fathom deepe.

About an halfe mile within thereon you doe meete Stonebanke you shall finde there no more then 3 fathom water, and thereon within is it deepe againe 10 and 11 fathom.

Comming out of the Sea, and that you doe fall upon westchappel, and that westchappel is southeast and southeast and by east from you, there you shall meete these foresaid 3 Bankes: first, Broad-banke, which is there deepe 6, 7, and 8 fathom, and thereupon within it is againe 17 and 18 fathom deepe. The 4 Weeden is Oosterbanke, the same is there 6, and 7 fathom deepe, but within thereon is it againe 24 and 25 fathom deepe, and there you doe meete Stonebanke, so steepe that it is not possible to leade thereon, for with one east you have 12 fathom, and with another east you have but 2 fathom, sometimes 13, 14 and 15 foot water, here is the most drynesse; then standeth Middelborgh by west Domborgh in the Roggen loafe, and is also very dry and steepe; Being over Stonebanke, and that you come thereon within, you shall finde there againe 21 and 22 fathom. Sealand may be seene, when you stand above upon the ship, upon 16 and 17 fathom, against Walcheren doth fall a third part of the floud towards the Land, and afterwards east and by north.

When as you come to fall out of the west, so that Boeyens-Church standeth by west, or on Church of westchappel, there you shall finde alwayes harde ground, and Ras up Rasse upon 23 and 24 fathom, till you come right against the Raen; the first stekeground, which you begin to espy, is close by the Raen; Middelborgh on the downe or about halfe way the Sconce and the doune, or a doune or two inward, there you shall finde all over stekeground, till unto the Raen.

Brugge comming by west the Staker or in Lifwegen, you have there all hard ground, till upon 8 and 9 fathom, there you doe come in the faire field where the Sealands Fishers doe fish, and is all stekeground.

Brugge in Lifwegen, comming out of the sea, then you shall meete there Rever, deepe 8 and 9 fathom, there betwixt is a litle difference, but alwayes hard ground, till unto the smal Banke, there you shall finde no more then 5 fathom water, thee is very straight or narrow, and so you shall in the Eastwele; this narrow Banke stretcheth from the Raen off from the west-side, so also as the Splete doth, and eastwele is the fastholding of the Splete.

He that will saile into the Inward wheeling, may take on the Land, when as he thinkes, that he is past Eastende, running close a long the Flemish strand, so neare as you please, for it is there all over faire ground till you come before Heyft, there you shall meet the horse marketh, hold then a ship, or 2 ships, lenght, by north the Eastdownes of Casant, for you may not bring S. Lambrecht on the Eastdownes of Casant, for if you did you should under saile the horse marketh, and there fore you must keepe S. Lambrecht so standing, for here is not much Ript, and it is here reasonable deepe, for with bow water it is here at least 18 foot water; follow so your course by the horse marketh along; comming in the Castle of Sluys, or within the Casants downes there is Ript very dry, and no more as 7 foot water, there fore bring Middelborgh then by east Theefs point, and hold that so standing, the Castle of Sluys comming within the downes of Casant, there goeth a point off from the Fastland, which is called the Krake-sand, therefore you must have there a care of the strand, & come the same neare within a Pistol shot, then you need to feare no more danger there; Also, those are your markes in the sailing out: when as you have Heyft by east the hight, then you may very well lead on to the Horse marketh, when as you are past by the downe of Flushing, and that you will loofe to the flat, goe then not to close by the Casants side, for the Floors sake, for it is there by north wide and broad enough, you may also lead as well to the Krakesand.

The Wheeling.

He that will saile into the Wheeling, must bring the tower of Wenduynen in the Easterly shore, and hold that so standing, till you are over Ript, and goe then eastnortheast on; Brugge comming in Lifwegen, bring then Blanckenbergh within the inward gollowharde, following your former course; Brugge on Heyft and Westchappel on knocke, you may not well come there, or else you should be to farre bey ond the north, and you should come Englishpol too neare; But bring Brugge a mast length by east Heyft and westchappel on knocke then you have the right depth, and then you are about halfe way in the wheeling, in the right farewater; Seeing Middelborgh, hold then the smallest Tower a fathom by south the greatest, or Flushing by north the Cittiehouse. Within the cape lye, 3 little downes, when as you have Middelborghs greatest tower therein, and that you cannot see the smallest, hold it then so standing untill Soutelande, when as you have Middelborgh in these three little downes, then you are also about halfe-way in the Wheeling; The tower in Middelborgh may not touch on the greatest, or else you should be to farre beyond the north, and come upon the Englishpol, Flushing may not come on the Cittie-house, or else you should be to farre beyond the south, and come upon the Frenchpol, therefore hold these foresaid markes of Middelborgh and of Flushing even wide from eachother, then you are alwayes about halfe way in the Wheeling, till the Castle of Sluys come by east S. Lambrecht, then are you free from all Sandes, Reeves and dry places. From the French-pol there stretcheth a Risse off about westnorthwest, thereupon is but 8 foot water, and is very small the Castle of Sluys comming a litle by west the Casants-downes, there, you doe meete this foresaid litle Risse, the which can be underfailed from by west.

For to saile out of the Wheeling, bring Flushing even free on the northside of the Cittiehouse, and hold it so standing, till you have Middelborgh in the 3 litle downes, which doe lye next to the Cape, hold that so standing til you begin to loofe the same, have then a care of the markes of Middelborgh, and Flushing foresaid.

The Splete.

For to saile into the Splete, bring Blanckenbergh by west the uttermost gallow-shaerden, and hold it so standing till you have the knowledge of the Ript, runne then so along the way of the Banke eastnortheast in, Brugge a cable lenght by west Heyft, and west-chappel on knocke, that is the right depth, and then are you about halfe in the Splete; Seeing west-

west-chappel on the first downes, or Middelborg over the Cape, hold the same so standing, till Flushing comes in the white wall; you may doe no harme with going inward towards Walcheren, so long as the mill doth not touch Flushing or that Flushing doth not come by north the mill. If you doe bring Blackenbergh on the Gallowshaerde, before that Brugge comes in Lifwegen, then you are to farre into the land, and to close by the Ript.

Blanckenbergh on the Gallow-shaerden and West-Chappell on the downes, then are you about halfe-way in the Splete.

Brugge in Lifwegen and Blackenbergh an halfe ships length by west the utmost Gallowshaerden, then you are also about the midst or halfe-way in the Splete, and this is your best marke, and is also your next crosse marke that you have.

The Deurloy.

Betwixt the Rassen, and the dry Raen goeth the Deurloy in, upon the Rassen stands no more then 3 or 4 foot water, and is very farre flat and hard ground, and the drye Raen falles wel 4 foote drye above water and is on the north-side so steepe, that the same is not possible to leade. When the Castle of Sluys comes in the east downes of Casant, then you may come there upon, For to saile in the Deurloy, you must have a care, that when as the Castle of Sluys stands in the Casants Downes, then you are upon the drye Raen, but when the foresaid Castle stands by west Casants downes then you are free of the drye Raen, and when the Castle of Sluys by east is free from the east downes of Casant then you are in a good way in the Deurloy; when as the Castle of Sluys standeth a litle by west the downes, of Casant, then you may freely hold thereupon with a northerly winde, when you doe not fall to high by sharpe winde, and run so through on the north side of the Sloe, till West Chappell comes on the first downe, then you are in a good way in the Splete. For to saile into Deurloy comming out of the west, hold West-chappell betwixt the mill, and the Sconce about halfe way or the midst by north the Soutland till the Castle of Sluys comes by east the east downes of Casant or S. Anne from by west ont the Casants-downes, for to runne so by north the drye Raen, till Westchappell come in the first downe, hold then eastsoutheast on, right upon Flushing.

For to saile from Flushing out of the Deurloy hold the tower in the white wall, till the Castle of Sluys comes within a ships length on the east-downes of Casant; hold that so standing till West-chappell comes about halfe-way of the mill, and the Sconce, goeth then northwest out of the Deurloy. You may also have a care upon this following: When as the tower of Flushing doth touch the wings of the mill, then you are to close by the Rassen, so much as the tower of Flushing is free of the mill, so farre are you free of Rassen, till Westchappell is free of the Downes, goe then westnorthwest in Sea, when as the foresaid wing of the mill is even free from the tower of Flushing; there you have with low water not lesser then 22 foote hard ground.

For to saile into, the Deurloy, comming, out of the north, bring West-Chappell about halfe-way the Sconce and the mill, till you are within the Raen, when as the Castle of Sluys comes within the eastdownes of Casant or S. Anne by west on the downes of Casant, till west-chappell comes within the first downe, goe then right on upon Flushing, there have you the deepest water. By darke sight seeke freely to come on the Rassen which are farre flat, as also the Geer, & hold alwayes one side, the dry Raen is also on all sides flat, except there whereof we before have made mention, so that you can doe no harme if you have a care of the dry Raen, which must not onely be done by the lead, but also by the dividing of the floud, for the streame doth easily misleade.

The Sloewe.

Betwixt the Raen and the dry place goeth the Sloewe in, comming out of the sea when as you have Middelburgh in the Sloep of Sout-land, and Brugge in the Staeker; you are then in an open Channell from these Sloewe it is a very good marke, both for the Sloewe and the Deurloy, but you can scarce Middelburgh on the eastside of Slop, without coming to close by the dry Raen; comming out of the Sea, and that you doe fall below at the Deurloy, for to runne by west the dry Raen, through the foresaid Sloewe, bring then the Castle of Sluys about halfe way in the channell of Sluys there you shall finde with low water, no lesse then 22 foot water, for to catch this channell or hole from without, bring Brugge in the Staeker, or West-chappell in Knoocke, for these

markes doe gree just one with another, hold this so standing, till West-chappell comes in Walcheren on the first downe, you are then in a goot way in the Splete.

And if by darke weather or against the evening that you were afraid to runne out of the Splete and that you would faine bee without all oule nesse or dirt, then you need not to be afraid of these Sloewe, for shee is broad and wide; from the Castle of Sluys or on teersand of Casants downes, you may not well come there, and (againe to the west) till the Castle of Sluys comes on the feet-sand of Flandres, and is on both sides flat, upon hard going ground. In these west-holes, viz: the Inward-wheeling, Wheeling and the Splete, runnes the Ebbe a long time Southward, so that you right floud goeth not above 4 houres right; therefore you must have a good care of these things. In the foresaid west-holes maketh a south-east moone a fore-floud; that water which you have not got with a south moone; you shal not get it else.

Bot-Kille.

When as you have the Cape even free from the downes, then are you open before the Bot-Kille, or when as you have west chappell the length of a wind-beam by north the mill, then you may with a Shipp, which goeth 12 or 13 foot deep, hold on upon the land with low water; you doe runne then over the Taile of the norther Rassen, but you come with a deep-going Shipp in the right depth, hold the litle church in the mill one over against another. For to saile into the Bot-Kille, bring Boyens Church a litle by west the mill; it is a short Leet or verlaet, and a short marke; you may bring Boyens-Church well about halfe way the Sconce and the mil, but Bayons-Church in the mill there have you the deepest water, but then are you also close by Calo, Boyens-Church being a litle by north the mill, then are you close by Calo, which is a steep hard Sand, and you cannot lead thereon. Comming into the mouth, hold Flushing by north Theefspoint, because you should not come to close by the litle Bench, called the Geer; goe close along behind the land, it is there deepe enough, before the Bot-Kille is 24 and 25 fathom hard ground, Rafs op Raefs, and it dries up by 3 and 4 fathom, till you come upon 8 and 9 fathom, there you have clayground so long till you are by the Raen. Before the Fishershole have you upon 16 and 17 fathom soft ground, and it dries up by litle and litle.

In these Pink-Sea maketh a southsoutheast moone a fore-floud; and when the moone is south and by west, then goeth the floud first right in Sea.

Fishers-gat.

For to saile into the Fishers gat, bring Boven-Church on the east-end of the new Dike, you are then in the right deepe; you may bring west-chappell in the east-end of the new Dike, but you may come then no more northerly. For to be free of the Querens, Boyens-church may not come on the countrey-corn-house, or else you should come to close by Calo, but Boyens-Church upon a ships-length on the Corne house, and not nearer, for Calo is very shallow and steep; This country Corne-house standeth about a shipp's length by east west-chappell. When as the floud begins to go in Sea, then have you in this Fishers-hole a fore-ebbe and when as the ebbe begins to goe right in Sea, then is in this Fishers-hole a fore-floud, this Gat or Hole is wide and shord, and deep all along the land till unto Flushing. If you were sailed into the Fishershole or the Botkille, and did geth an easterly winde, runne then unto the Sloewe, which runneth through betwixt the norther and the easterly Rassen; then marke thereof is: East-chappell in west-chappell, there you may come also upon the lead till in the Deurloy, for to loofe alsoo up unto Flushing, here in this Sloewe is not lesser (with very low water) then 12 foote water. If some doelye before anchor under Stone-bench, and that they must chap off the anchor or spill something of it, they must have a care of the Reuteel, upon the which (with very low water) is not lesser then 4 fathom water; seeke the Reuteel on, and hold the Streak of the Reuteel, till you begin to see the Rogenbread, the which doth shew more plaine then the Downes of Domborgh; doe not turne from the land when as you have the Downes of Domborgh south from you, or the Roggenbread south and by west from you, bud hold al close a long by the land, so neare by as you please, because you should not come to close by the Banjart, and goe so forth upon the lead into the Veergat, all along close by the land; it is there deepe and cleane, till you come behinde

The Flemish coast from Wendoune through the Heads,

the point: If you finde to be good to chap off your ancker, stay then so long (if you can) till the flood goeth right; this foresaid Reuteel gives you a Warrant to have a care of the Querens, for the Querens doe lye within this Reuteel.

The Flemish Coast.

Flanders is a douny land, and full off little hils, with many towres along the Coast, stretcheth almost westsouthwest unto Calis.

1. By West the Sluys-gat comes a Tower, and is blunt and thick, called S. Anna.

2. Is knocke a steepe or sharpe Tower.

3. Is West Chappell, which is a blunt Tower with a blunt Cappe thereupon.

4. Is Heylt, a longst steepe tover, higher then knocke.

5. Is Lifwegen, a thicke blunt Tover, the thickest there about. Betwixt Lifweghen and Blanckenbergh have you the gollow sheerde.

6. Blanckenbergh is also a thicke Tower, higher then Lifwegen, but not so thicke.

7. Bruggelingen are two high steepe Towers, which doe lye into the land thereupon followeth the Sconce of Blanckenbergh.

8. Is Wendoune; a thicke blunt Tower, without a Cape, right contrary all former descriptions of the Sea-bookes.

Of the tydes and courses of the Streams.

Before Brewers-haven, a s.f.w. and n.n.e. moone maketh high water.

In the Channell of brewerf-haven a south and by west moone.

At Teiveer a s.f.w. and n.n.e. moone.

In the Veer-gate a south and north moone.

It is not good to runne in at Veer-gat, especially with a southerly or south-west wind, before that the flood be halfe spent, for the after-ebbe, and the fore-flood fall thwart over the Baniert hard in at the Roompot, towards the land off Schowen, but when the flood is halfe spent, then it falleth right in at

the Veer-gat. When the moone is southeast, or northwest, then the water is there already two third parts flowen.

Like as it is here before said of the Mase and the Goerees-gat, so also here before the channells of Brewers haven and Ter-Veer the flood turneth about with Sunne, so that the afterflood falleth in the channells, and then afterwards turneth about to the southwards, and becommeth a running ebbe, but the afterebbs fall right out at the channells thwart into the sea, and then with the foreflood about againe to the northwards.

Before the Wielings a south and by west and a southsouthwest moon maketh the highest water.

At Flushing and Ramekens a southsouthwest moone.

At West Chappell on the land of Walcheren, a south and north moone maketh high water: When the water is a halfe houre fallen, then the tyde beginneth to fall out there, and when it is flowen a halfe houre, it beginneth to fal in: but before the Botkill it beginneth too goe there first an houre before the lowest water, but it falleth long at sea. In the Splete, & over the showlds lying thereabouts, the tyde turneth about against the Sunne, & at last falleth in at the channells. A south and north moone maketh there the highest water. The fore-flood falleth over the showlds there towards the land. When the moone is about eastsoutheast, or that the water bee about two houres flowen, then it beginneth to turne towards the south. first southsouthwest, and then past the south towards the east, untill that the moone be southfourtheast, and then the flood falleth to the eastwards. When Blanckenbrough standeth about southeast and by east from you, from thence to the eastwards, you shall not finde the tydes to turne about.

Against Sealand in the fare way a third part of the flood falled towards the land, and afterwards east and by north. Men may see Sealand from the poope in 16 fathom.

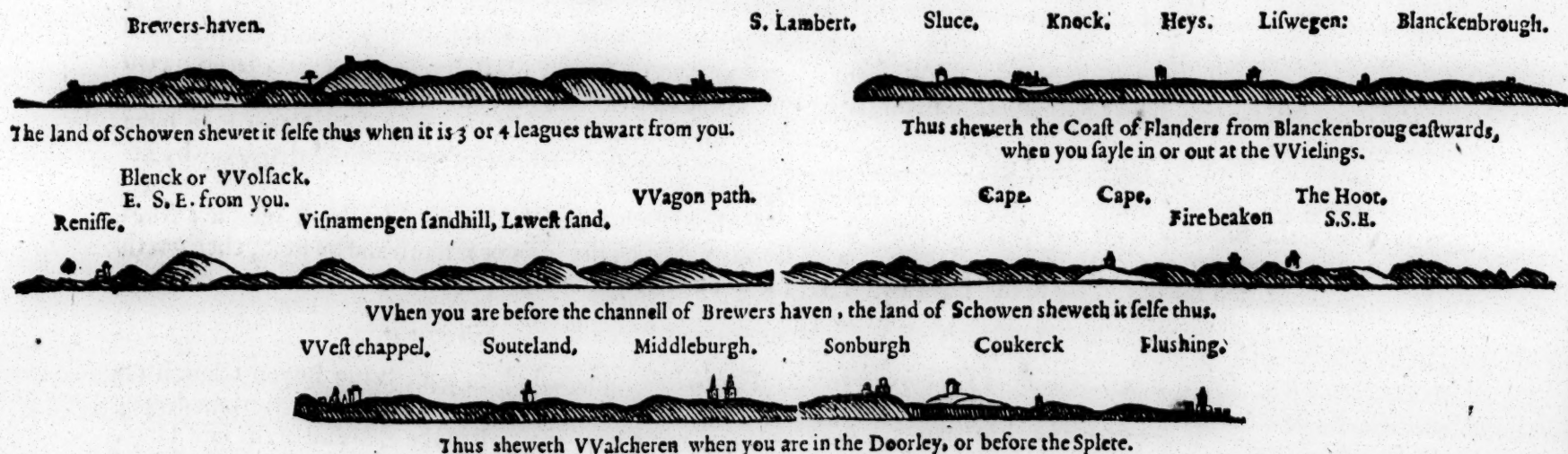
Courses and Distances.

From Flushing to Blanckenbrough nearest westsouthwest — 9 leagues
From Blanckenbrough to Ostend southsouthwest and by west — 2 leagues
From Flushing to the north Forland, w. somewhat southerly — 25 leagues
From the Wielings to Dover westsouthwest — 26 leagues
From the Wielings to Layt-staffe or Yarmouth, northwest and northwest and by west — 38 or 40 leagues

Heights.

Flushing, Ramekens, and the south coast off VValcheren lye neare in 51 degrees and a halfe.

How these Lands doe shew them selves at Sea.



The third demonstration,

Which unfoldeth,

The Coast off Flanders, from Wendoune to the Heads about Tresport, together which the Coast off England, the Promontory of Dover, and from Dover to Fierley.



Et wixt Wendoune and east ende lyeth also a little steepe Tower, called Ian Davids little Tower.

Afterwards followeth the Tover off East-end, and hath a little steepe tover. When Blanckengergh is e. f. e. from you, from thence E. ward begins your running of the streames, stretcheth against the Sunne for to turne, but from thence Westward you shall finde no moore turningh streames.

Of the Flemish Banckes.

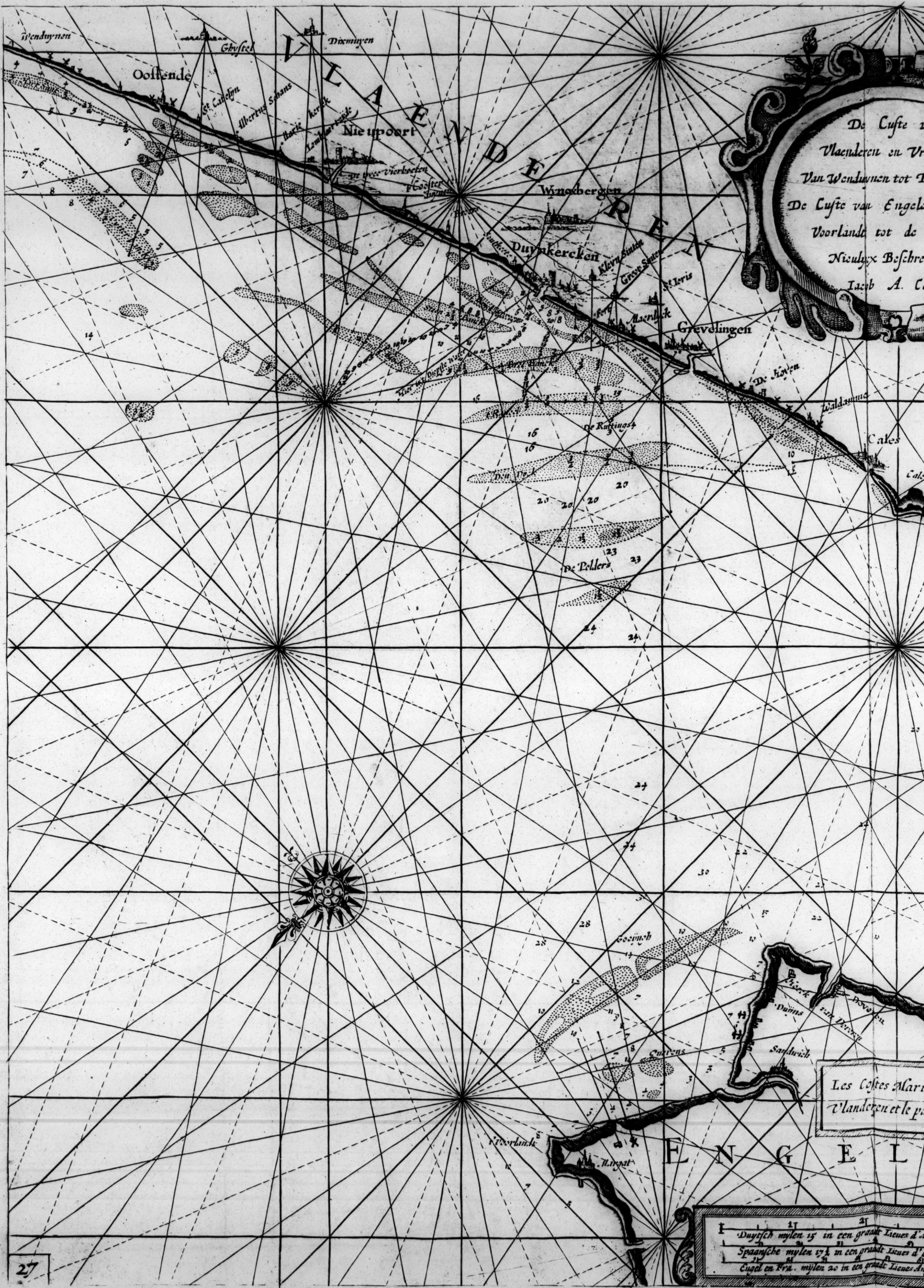
All the Sands which doe lye betwixt the hole of Sluse and Calis, are called the Flemish banckes; whereof the first is the Sand, being very hard sand, from the Horfe-marketh upon 2 fathom, and stretcheth so along the coast upon 3; three and 2; fathoms till you are past Oost-ende; there is southward, betwixt the land and the Bancke 4, and 4; and 5 fathom vwater, by north is the right farewater, from the Wheelings,

called the Kute, there is vwith low vwater 5, 6, and 7 fathom Kute. vwater; about a league and a halfe, thwart from Oostende liet the Rip or utmost Bancke, there is no more then 4 and 3 a halfe fathom vwater, upon Geese, on the East end of the towne of Oostend, and about halfe way unto Lifwegen, betwixt the Downes and Blanckenbrough, you are then upon the Rip. The Rip. Betwixt the Rip and the land lye also two little plates, of 3 and 2 a halfe fathom.

Before Ostend begins a Bancke, which stretcheth a long the Coast till before the Haven of Newpoort, thereupon is 2 and 2 a halfe fathom vwater, betwixt the land and the Bancke is it 4, 5, 6, and 7 fathom deep.

Thwart off by north these bancke lieth Beane-land of 2 fa. Beaneland thom water, and upon some places 2 a halfe fathom, there by West, and right under New-port, lyeth the Strooms off two Strooms, and three fathom.

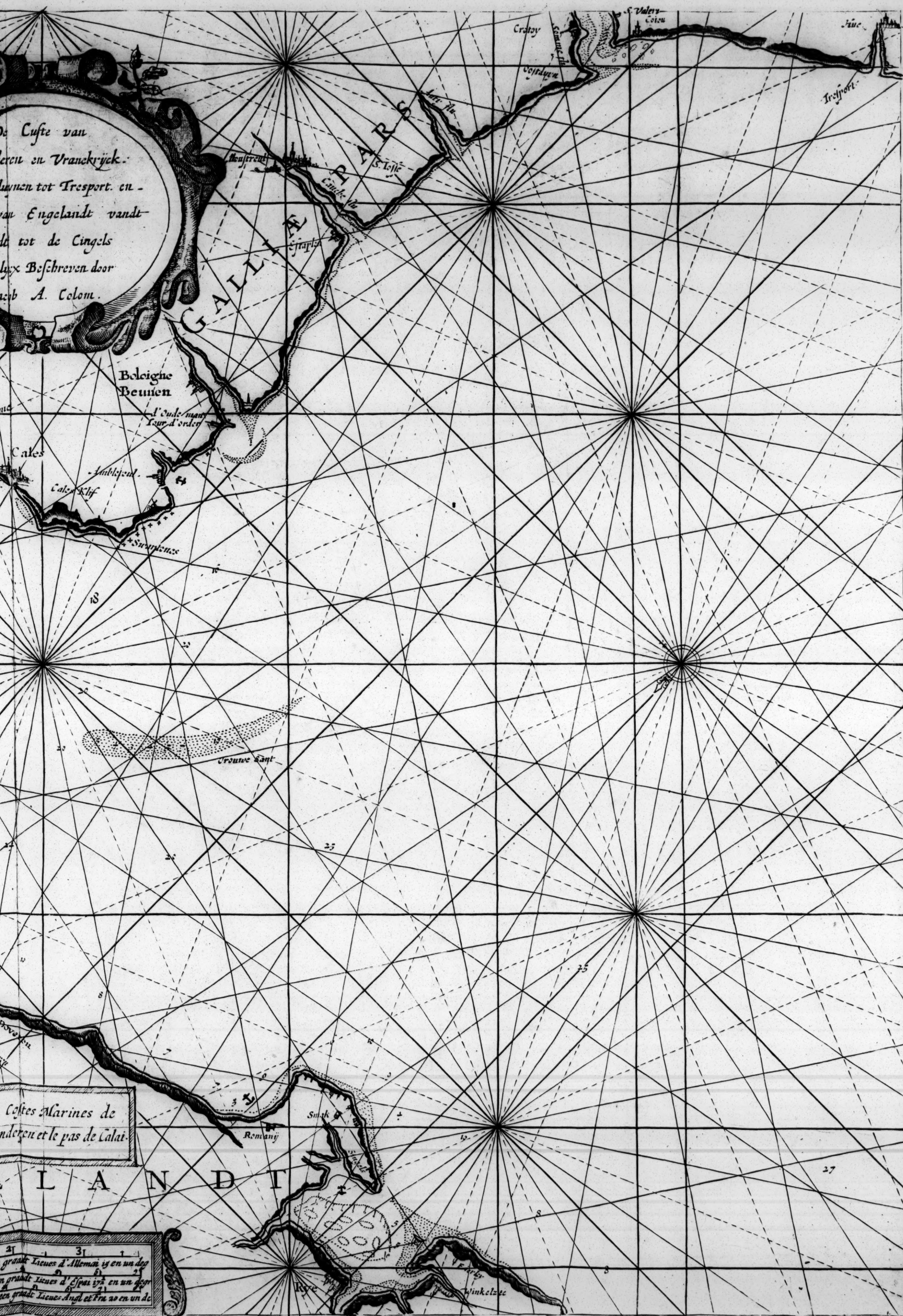
By east of Newport goet a little Riffe from the wal, whereof you must take good care. Betwixt Dunkerck and Newport doe lye 6 banckes; whereof the first is called Brothers banke,



De Cufte
Vlaenderen en V
Van Wenduynen tot T
De Cufte van Engela
Voorlande tot de
Nieuwlyx Befchre
Jacob A. C.

Les Costes Mar
Vlaenderen et le p.

Duyfch mylen 15 in een grade Lignes d'
Spaanfche mylen 17 1/2 in een grade Lignes d'
Engel en Fra. mylen 20 in een grade Lignes d'



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banke, and is of three hookes, lieth next the Brothers and the Cloitter at the Downes and very close by the land, stretcheth off from the wall, about westnorthwest a league in Sea, you may runne through betwixt the Brothers banke and the land upon 4 and 5 fathom with low water, but you runne there commonly round about westwards, when as you saile along Flanders, within through the Bankes.

Cams. The second is the Cams, which doth lie by west the Brothers Banke, the same is 3 fathom deepe, on several places of 2 and 1 3/4 fathom; you may make Road betwixt the land and these Banke upon 7 and 8 fathom for all windes.

Norther-cams. If you doe runne by north the Cams beyond the west, you runne then against the Killen, or on the norther Cams, there is 3/4 fathom water, as also on severall places not so much, and a little by west there you have the Brake, which stretcheth in a Bight from the norther Cams, till you are close on the Splinter before Dunkerke; so that you runne so much west as by east, thereupon is 1. 1 1/4 and 1 1/2 fathom water, but upon the west end is it deeper, so that with low water there is three and four fathom; depth within the Brake is it tenne and eleven fathom deepe, there runnes a Cloave through of 12 or 10 foote deepe.

Smallban-ke. By north the Cams and by east the norther Cams, lieth the Small Banke of 2 and 3 fathom water, but upon the Tailles it is above 4 fathom deepe, betwixt the Small Banke and the Cams it is wide and broad, there is 8 and 9 fathom depth.

Stone-banke. By north the Small Banke lieth the Stone Banke, which hath on the east-side an hooke, and stretcheth almost till you are past New-port, is on the west side three and four fathom, and upon the southerly Taile of the hooke on the east-side 3 fathom, on the norther Taile of the hooke 1 1/2 fathom deepe; on the north-side lieth a Rasse in the stone-banke of 3 foot water, betwixt the Small-banke and the Stone-banke is 8 and 9 and 7 fathom water, and is reasonable broad betwixt both.

Kalbancke. Calbanke lyeth by north the Stonebanke, and is in the midst 2 fathom, and upon the Taile 6 fathom deepe, in the midst of the Cal-banke lieth a little Banke, which is called little Smal banke, thereupon is but 3 foot water, betwixt Stonebanke and Cal-banke is it very roome, you have there 10. 9. 8. and againe 7 fathom water, stretcheth with the east-taile unto the utmost Banke, Cloave betwixt both is called Trop-zeel, which is the right fare-water to runne beyond through betwixt Beaneland and Stream, there in the fare-water is it 12. 11. 10. 9. 7. 6. and upon 5 fathom deepe.

Trop-zeel. By north the Calbanke lieth also a great Banke of 8. 9. and 10 fathom, whereupon doe lay some Rasses off 5 and 6 fathom water.

Markes of the Flemish-banckes. There doe lie also 5 long Bankes, along Flandres, to wit, when Grevelingen, is south and south and by east from you, then are you next the west end of the Bankes, and when New-port is east and by south from you, then are you next the east-end, they are very long, betwixt every one goeth a Channell through, each of a sundry depth.

The Cliffe. About 4 leagues north and by east, and northnortheast from Calis, and N. N. E. from Calis Cliffe lieth the utmost Banke, called the Cliffe, is at the dryest place about 8 foote deep, by north off from the Cliffe, towards the Sea, is it 23 and 24 fathom deepe, upon the south side, towards Ruyting, runneth a Channell through, called the Polder, and is wide and broad, of 20 and 23 fathom deep.

Ruyting. The second is called the Ruyting, lieth from Calis north-northeast, and from Calis Cliffe northeast and by north, about 3 1/2 leagues, and it is there 5 or 6 fathom deep, upon the south-end lieth a Polder thereupon is but 1 1/2 fathom water, when great Cassell comes over against Mardike, then you need not to be afraid of the Ruyting, but Mardike must not come more westerly, otherwise should you saile upon the aforesaid Polder betwixt these and the third goeth a Channell through, of 18 and 20 fathom.

The Dike. The third Banke is called the Dike, lie from Callis Cliffe northeast 1 1/2 league, is upon the north end 4 and 5 fathom deep, but upon the south end 5. 7. and 8 fathom, upon this Banke lieth also a Polder on the south-end, but of one fathom depth; Wynoxbergen just by east the great Castle, you runne then right upon the Polder, these Bankes are very dangerous, for the Ruyting, lieth almost in the farewater, betwixt this Banke and the fourth, goeth also a Channell through, is first by north 12 fathom, and begins further beyond the south to be 9, 7, fathom, but is somewhat dangerous to runne through, for you have the Dike norrh, a little beyond the south you have the Rateling, is at the highest nine fathom, and runneth upon 4 fathom, and sometimes lesse, and somewhat further beyond the south, you come one against a Polder,

which lieth upon the Ratel-Banke, whereupon is but 4 and 4 a halfe foot water.

The south Banke is called the Ratel-banke, lieth from Calis Cliffe northeast, and northeast somewhat easterly 3 a halfe league, is deepe 3. 4. 5 and 6 fathom, upon the south-end lieth also a dry Polder, of 4 or 5 foot water, with Springstream fall those Polders drye, betwixt the Rater and the Dike have you the Rateling of four, five, seven and nine fathom, and runnes unto the Dike.

By east the Ratel-banke, to wit, betwixt the same and the Broad banke, goeth also a Channell through, the end is wide and broad, and on the west end runnes it reasonable smal or narrow, is throughout of 14 unto 16 fathom water.

In all these channells you may saile up and downe, betwixt the foresaid Bankes, from the one in the other, and sett betwixt the Bankes where you please.

Great Cassell on Mardike also you may freely runne over the Dike and the Ratelbanke, without hindrance on the Polder.

The fifth is the Broad banke, lieth from Calis Cliffe, north-east and by east somewhat easterly, is upon the southend 4. 5. 6, 7, and 8 fathom, hath on the east side a great corner, shooteth with the northerly wind beyond the stonebanke, almost unto Calbanke, and is upon the east end of 4 unto 3 and 2 a halfe and 2 and 1 a halfe fathom, the souther taile of the corner runneth close unto stonebanke, not withstanding there is a good passage, (for to runne through with shippes) of 12, 11. 10, 9, 7, and 6 fathom, upon the taile is it from 2 unto 2 a halfe and 1 fathom, Smal Sinten a litle by west the great Castle, you should runne there right in the middle upon a Polder which lieth upon the Broad-banke, and is almost a leagues length, also he that is upon the Ratel banke, hath through out no more then 4 and 3 foot water.

Betwixt the Beacons and the Broad banke, is it wide and broad, and 14, 12, 10, 9, 8, and 7 fathom deepe.

The Splinter shootes off betwixt the wodden Wambus and the Haven of Dunkerke from the Flemish Coast, and runnes so forth in Wilbertland, unto the Broad Banke, you can come through the Splinter on severall places, which you may reade in the Description thereof.

By west the haven of Grevelinge lieth a Banke or flatnesse along the wall, and stretcheth a great deale off from the land seaward, till close by Calis, called the Newland, you may runne thereby along or over upon 5, 4, and 3 fathom, so as you please.

The haven of Calis falleth with all Ebbes very drye, and with high water, upon a dayly Ebbe, is there not lesse then 3 fathom water. For to saile therein, keep the mill (standing on the east side of the towne) right over the easter Head, and runne so close by the Easterhead in, and leave the Castle on the west side from you, from the Westerhead runneth a little Riffe, off therefore you must have a care thereof. Comming within the Westerhead, you must turne up westwards, till you come in the Kuype, where you may sit drye with low water. In the night, when it is Ebbe stand two fire beacons, you may runne thereupon in. It is not good to runne into this hole before the highest water, because of the strong streame, which runneth therein with the flood, for you must have a care off the anckors of the ships which lie there within. It is there within dangerous and bad to lie, especially with a norther wind, which blowes there open in.

Thwart from the westerhead of Calis lieth a Banke of 2 fathom you may run through betwixt the head or Meyland and the same Banke upon three fathom with halfe flood the Banke is off two fathom depth. You may set it under Calis Cliffe, on the east end, upon 10 fathom, but on the west end lieth a Stone or Rocke under water, a little Canon-shot from the land: Calis Cliffe lieth betwixt Calis and Swarteneffe.

The coast of Engeland from Dover to the north Forland.

Betwixt Callice and Dover amiddest in the fareway, (or somewhat nearer the French side then the English) lieth a narrow banke of foure leagues long, lying about N. N. E. and southsouthwest alongst the land off Blacknesse, being called the Vaen, and by the Dutchmen called Vrow-sand, off 1 and a half 2. 3. 4. 5. 6. 7. & 8. fathom depth, & runneth to the southwards toward; the land of Bulleyn. West and by south from Callice cliffe, and south and south and by east from Dover, is the shouldest of it, at low water not deeper then sixteene or seventeene foot. On both sides of this banck, as well alongst to the eastwards as to the westwards off it, it is 20, 22, 23, and 24, fathom

24 fathom deepe. Men may anchor before Dover for a north and northwest wind, right against the Castle, in tenne fathom, is the best road, and cleane ground. For to saile into the Downes from the southwards, you must run about by the south Forland, within two cables length alongst by the land, and anchor thwart of the middlemost Castle in 7, or 8 fathom.

The southermost point off Goodding, and the south Forland lye N. E. and S. W. asunder.

Goodding Betwixt Goodding and the Valley in the land off the north Forland, called Ramsgat, lie two showlds, whereof the westermost is called the Quernes, and the eastermost the Brakes.

For to saile from Dover (through within the Goodding, betwixt the Goodding and the Brakes) to the north Forland, you must goe on north and by east so long untill that the mill upon the north Forland come to the west side off the Valley in the north Forland, then goe yet north and by east, and northnortheast, untill that the little steeple upon the North Forland come to the east-side of the foresaid valley, then you shall bee to the northwards off the Brakes, and then the little flat steeple upon south Forland commeth to, or right over the third white Chalckhill to the Northwards off the south Forland, that is a direct long marke; for to saile through betwixt the Brakes and Goodding, as well when you come from the Northwards as from the Southwards.

brakes. For to saile through within the Goodding from the northwards, you must not come nearer the Brakes then in seven fathom, and set the south Forland southsouthwest from you, and saile then so right with it, and then you shall runne alongst the best deepe. When that the flat steeple upon the North Forland standeth in Ramsgat or the Valley, then you shall be thwart of the Brakes, and when the mill commeth in Ramsgat, you shall be to the southwards of the Brakes.

When you lie in the Downes, and that the inner point off the cliffe off the south Forland lie southsouthwest from you, then the Quernes lie north and by east from you, and the N. end off Goodding N. E. from you.

The north end off Goodding, and the point off the north Forland lie southeast and by east and N. W. and by W. a league and a halfe asunder.

For to sayl through betwixt the brakes and the Quernes. For to come from the northwards into the Downes through betwixt the Brakes and the quernes: there standeth a Church upon the high land of the south Forland, to the northwards off it, which is a flat steeple, and the church somewhat great of body, and there are three Castles upon the strand off the Downes, you must bring the foresaid Church with the flat steeple right in the middest betwixt the two southermost Castles, and then you are in the fareway in the middle off the channell, and that wil serve for a leading mark to run through betwixt the Brakes and the Quernes, and the course lieth through S. S. W. If the winde bee southerly, that you must turne to windwards through, runne not further over to the eastwards then that the foresaid Church come within 2 ships length of the southermost castle, for if you should bring them neerer, or together, then you should run upon the brake, and being east about, run not further over the westwards then that the foresaid Church come within two shippes length of the three, for if you should bring them neerer, or together, you should run upon the Quernes, and these markes will serve to turne to windwards through betwixt the Brakes and Quernes either from the northwards or the southwards. The Brake is steep, being 5 fathom close alongst by the side of it, and in the middle of the channel is but 15 foot at low water, so that it is deeper by this side of the Brake, then in the middle of the channel. As you turn to winwards, and run over to the eastwards towards the Brake, as soon as you must cast about, or els you should be against the Brake: the Querne is flat, but neverthelesse as soone as you finde it showlder (in running over to the west wards the Querne) then 15 foote, you must cast about again, and so turn through. About halfe a league from the north end off the Goodding to the southwards, lieth off a flat taile or spit off sand to the westwards from the Goodding, a great musket shot off, and falleth dry a good wayes off at low water, which maketh the channell there betwixt the Goodding and the Brake very narrow, the thwart markes off this taile off sand are these: up within the iand, a little to the southwards off Ramsgate, stand 3 or 4 high trees together, when these trees doe come right over the southermost end off the cliffe that lieth also a little to the southwards off Ramsgat, then you are thwart off this foresaid taile off sand, as soon you shall bee past it, then you shall have more roome to turne to windwards, and may run further over to the Goodding.

Thwart markes off a taile off sand, lying off from the Goodding.

For to run about a seabord of the Goodding.

For to saile from Dover without the Goodding to the north Forland, you must keep the point to the westwards of

Dover without the south Forland, and goe on northeast untill that the north Forland northwest and by west from you, then you may boldly run to the north Forland and anchor before Margate, or where that you shall thinck it best, but thwart of the steeple, where the mill standeth by, is the best roade. Or when the point of the north Forland lieth southsouthwest and southwest and by south from you, there is also good riding in eight or nine fathome. Betwixt Margate and the Reculvers, men may anchor every where in fixe or seven fathom at halfe flood.

Betwixt the Querens and north Forland men may also run through to Sandwich, there runs of a little Stonebanck from the shore, called the Fourefoot, betwixt that and the Querens it is at halfe flood two fathom deepe. The Querens are lately growne much lesse, and shifted, so that the north end of them is almost gone.

About a great league to the westwards of Callice cliffe, Blacknesse lieth Blackenesse, a fowle out-point, thwart of it lye many rocks alongst the shoare. From Blackenesse to the River of Bullen, lieth the coast south and by east three leagues, a league to the southwards of the Nefse, the land falleth somewhat in with a faire sandy Baye. In this Baye lieth a Fisher village on the coast, thwart off it in the sandy Baye is a very good roade for easterly windes, in 5, 6, 10, 15, and 16 fathom, according as you will lye farre from the shoare. For to anchor there, you must bring the steeple of the village over the middest of the houses. This place is called S. Johns Road. A little to the northwards of that foresaid Fisher village, stands a mill with some houses, from thence to the northwards you may not anchor, for there the ground is fowle and stony. To the southwards of the Roade towards the River of Bullen, lye also some little rockes alongst the coast, which you must not come very neare to.

Upon the north point of the River of Bullen standeth a tour high thick Tower, called a Tour d'Ordre, by sea men the Oldman, a speciall mark for to know the River by. About an English mile to the northwards of this Towne, a little mile suncken from the shore lieth a little suncken rock under water, where a Huye or Smack may not goe over.

Upon the south point of the River of Bullen standeth a stone wall, and upon it a great Beakon of a mast, thwart off it from the south point lieth off a little riffe or should, that you must shun, and run close aboard alongst by the Flead, which lyeth at the north point, and hath been there lately made. When you are come within this Head, you must presently let fall your anchor and ride there; It is a tyde-haven, there men must goe in at high water, and at low water lye drye upon the chindle. Without, before the River, lieth a banck, men were wont from the southwards to run in over it in two fathom, and from the northwards in three fathom but it is now to the southwards deeper through the scouring of the water alongst the foresaid Head, which is made at the north point.

From the Oldman, or the River of Bullen to Somme is the course south about eleven leagues, between them lie also two other Rivers, Cauche and Anty, upon the first lie Eastaples & Monstreu, there you must goe in amid channell at the highest water, within, it falleth altogether drye at low water.

Men may saile into the Somme, through two channell, from the east point called the East Downe, lieth off a sand thwart before the channell; to the westwards off that riffe lyeth also an other great banck, between them goeth in Easter channell. For to saile in there, bring S. Valery a cables length to the Westwards of the west point of the river, called the Oordell, & run in thereupon, untill you come to the land and that foresaid west point; & from thence close alongst by it, or as soon as you get againe deeper water over the banck, then up eastward towards the Beacons. From the point of the Oordell lieth off to the N. wards a little riffe, upon the end of it lieth a buye which you must leave on the starboard side, and run in close about to the N. wards of it. From the point of the Oordell upwards, it is set all alongst with beacons, you must run alongst close by them, untill you come within the point of S. Valery, where you must anchor, and lie every tyde dry. The sand there within do shift so often, that they are not to be described for awayes.

For to saile into the wester channell, coming from the east or the north, you must run along by the bankes in six or seven fathom, and not nerer, they are so steepe, that a shipp sitting fast against them with the fore-shipp, at the stern hath three fathom. Coming towards the land at the end of the bankes, you shall finde a buye. Or els if you come from the west, and bring Grotoye a cables length within the Oordell,

For to sayl into the Somme.

For to sayl into the wester channell.

Oordell, and saile for right in, you shall finde the foresaid outermoit buye. Besides this, there lye three other buyes, whereof that foresaid buye on the point of the Oordell is the fourth, and the innermoist: you must leave them all on the starboard side towards the land, and runne alongit by them to the northwards off them.

These channels and sands there within all untill past S. Valery) fall at low water altogether drye, the buyes also fall drye, that men may goe by them; at halfe flood with a ordinary tyde, there is no more then two third parts of the flood be spent. With an ordinary tyde it floweth there five and sixe fathom, but with a spring-tyde seven fathom up and downe. At high water and spring-tyde, a man may goe over all the bankes and sands with eight or ten foot water: five leagues upwards lieth Abbeville.

Thwart of the Somme, it is farre of into the sea shewld water, five, sixe, seven, eight, nine and ten fathom, three or four leagues of into sea: he that commeth from the west, and findeth himselfe in darcke and misty weather to bee in such shoulding, may bee well assured, not to bee farre from the Somme.

Of the tydes and courses of the Streams.

Alongit the coast of Flanders on the land, a south and north moone maketh full sea.

In the fareway without the Flemish bankes in the sea, a S. VV. moone maketh high water.

In the midst betwixt the heads, a S. W. moone,

At Dover, a south and north moone.

In the Downes, a south and north moone.

At the N. Forland, a south and north moone.

Alongit the Flemish bankes, the flood falleth over the banks, towards the land, about the third part of the tyde, afterwards alongit the Land, but the after-flood falleth to the northwards alongit the sea in the right fareway.

VVhen the flood beginneth to goe there thwart off at sea, then it is already half flood on the land, and the water flowen halfe wayes, so that men may goe into all the Havens on the Flemish coast with 5 or 6 foot water.

In the midst through the Headens, the flood falleth northeast and by east, and the ebbe south west and by west.

From Dover to the N. Forland, the tyde falleth through within the Goodding N. and S. over the Brakes and Quernes.

Before Callice and Blacknesse, the flood falleth first one quarter to the land afterwards north northeast.

Betwixt Blacknesse and Bulleyn, the flood falleth north and by east by the

land, but a seaboard in the offing north northeast. A S. S. E. moone maketh there the highest water.

Betwixt Bulleyn, Diep, and before the Somme, the flood falleth first one quarter to the land; afterwards north east and by east, and the ebbe south west and by west.

Of the Depths.

In the right fareway betwixt the Marfdeep and the Heads it is 23 and 24 fathom deepe. A little without the Flemish bankes 18, 19, and 20 fathom, but neere Goodding, or about the north Forland, it is 26, and 28, and also 30 fathom deepe, the neerer Goodding the deeper water.

Being thwart of Goodding in 28 or 29 fathom, you shall not be 2 shots of a cast-peece from it.

For to sail out of the Marfdeep towards the Head, goe not on otherwise then south west, and southw. and by south, (but you must be very carefull to take heed off the tydes) when you shall reckon to have sayled 40 or 46 leagues, then edge over to the Flemish bankes, untill you come in 26 or 18 fathom, when that you are sure of these grounds then goe on south west, and at length south west, and by west, and you shal com in the midst betwixt the heads of Callice and Dover.

Flanders you may see from the Poope in 16 fathom, and then you are within the point of the Flemish bankes.

Callice cliffe and the fourth Forland, or the point of Dover, you may see when you are before them in 14 fathom.

To the southwards of the Oldman, or Tour d'Ordre, lieth the high land of Eastables, which is very good to be known, because thereabouts is no land so high. VVhen that is north northeast from you, and you be thwart of the Somme, it is there deepe 8 and 9 fathom.

Vpon the land off Somme towards Diep, stand many sharp towers, and some milles and trees, and hath all alongit the coast a sandy strand.

Courses and Distances.

From blanckenbrough to Ostend south west and by west	1 leagues
From Ostend to Newport west south west	3 leagues
From Newport to Dunkerck west south west.	5 leagues
From Dunkerck to Graveling west south west.	5 leagues
From Graveling to Callice west south west	4 leagues
From Callice to Callice-cliffe south west and by west	1 leagues
From the Heades of Callice and Dover the Risse of Iutland north north east	120 leagues
From Callice-cliffe to the Naze in Norway, northeast and by N. 253 leagues	
From Callice-cliffe to blacknesse south west	one great leagues
From blacknesse to the Oldman, south	2 leagues
From blacknesse to Somme south	9 leagues
From the Somme to Trefport west south west	7 leagues

Heights.

The Heads and Dover lye in	51 degr. 12 min.
The Somme lye in	52 degr. 18 min.

How these Lands doe shew themselves at Sea.

Wenduynen. Ostend Middlekerck. Newport.



VVaackerhout S. Catherine Lombardside.

Thus sheweth Fairlee, when you sayle alongit by it.

Niwpport. The broers. Soutkoten. Dunkerck.



Thus sheweth the coast of Flanders, betwixt Newport and Callice, when you sayle alongit by it.

Callice-cliffe.

Tour d'Ordre. Oldman.

The land of Bulleyn.

From Callice-cliffe unto beyond Bulleyn, the land sheweth it selfe thus, when you sayle alongit by it.

The high land of Eastaples northeast,

East and by south.

Thus ur dermoist is Sandhills,

thus sheweth the land betwixt Eastaples and the Somme, when the high land is north northeast from you.



Somme

Sandhills

VVWhite Chalky Cleeves.

Thus sheweth the land to the southwards of the Somme, towards Diep.



Thus sheweth Fairlee when you come from the west.

The First part of the Firie Columnne, THE SECOND BOOKE, Of the WESTERN NAVIGATION

Containg

*The description of the Zea-Coasts of the France from Tresport
to the Roscou, and the coast off England, from Pierley westward, to Englands end, the
Channell of Bristow, and with all the Sea-coasts of Ireland.*

The first demonstration,

Wherein are set forth the Coast off France, from Tresport to Roscou.

Tresport: From the Oldman to Diep, the course is southsouthwest sixteene leagues, but from the Sommer to Diep south west and by west eight or nine leagues. About halfe wayes betweene the Some and Diep, lieth the River off Heu, with this it on the north side lieth Tresport, being also tyde-haven, where men must goe in at high water, and at low water lye dry.

Diep. At the east side off the Haven off Diep, lieth a rane off rocks, and from it lieth a little riffe off chindle towards the north, or the west; to the southwards of this riffe goeth in the channell, abouth southeast in, it is very narrow, and a short inlet, there in lye three buyes in the midst of the deepe, not above a stones cast one from the other, men may run in on both sides of them, comming to the end of the buyes, they must keepe the middle of the channell, and run in betweene the heads, untill they come within the towne, and there make fast with a cable on the shoare. Men may not saile in there before flood, but not a halfe ebbe; at low water it falleth altogether dry, but within at the Towne men may ride a float, at high water there commeth three fathom, or at the highest not more the 3 fathom and a halfe water, there come out allwayes Pilots to bring ships in.

S. Valery. in Caux. From Diep to Saint Valery in Caux, it is west southwest foure leagues, that is also a tyde haven, where you must goe in with high water, it is a narrow channell, where you goe in between to the Heads, there is neither sand nor banck before it that can hurt you: being come in, you may let your anchor fall, and make you fast with a cable on the shore. Hee that hath neither cable nor anchor, may (being come there within) saile his ship on against the shoare in the chindle, and so save his ship and goods without dammage.

Fecam. From S. Valery to Fecam it is west southwest foure leagues, is a deepe tyde-haven, there stayeth at low water litle lesse then 2 fathom water. At the east side of the havens mouth lieth a banke or plate, men may with small shippes saile in through betwixt it and the land, and so runne in, sounding, borrowing it eight or nine foot alongst by the east shoare, which is flat. For to saile into the westwards off the plate, you must keepe the Tower off Fecam, without the land, or without the West point of the Haven, and then it shall bee southsoutheast from you run then upon that mark into the Haven, and then the foresaid sand shall remaine on the larboard side off you, and at halfe flood you shall have in the Hamens-mouth 2 fathom water, being come in before the towne, you may anchor there by the Wester shoare in three fathom.

Struyfaert From Fecam to Struyfaert it is west southwest three litle leagues. Without the point off Struyfaert lie two high sharp rocks. From thence to Synhead it is south and south and by west, 2 leagues and a halfe.

About northwest from Synhead lieth a bancke, upon which at low water remaineth no more then two fathom and a halfe water: the towne of New-haven commeth without Seynhead, then are you thwart of the banck: For avoid it, run in close aboard the Seynhead, alongst untill you come within the first mill. there let fall your anchor in 6 fathom, and stay for a Pilot to bring you into the haven.

For to sail into the River of Roan.

For to saile into the River off Roan, comming from the north or the east you must runne close aboard the land to the northwards of Seynhead, land alongst by it so long untill the

south side of the river come unto the point of Seynhead, then runne in with it, untill the land to the westwards of Newhaven come without Newhaven, saile then unto the Haven of Newhaven. Or else, if you will goe without about the banke or the Rettires, then edge over to the westwards so far from the land untill the river come open saile, then towards the point of Tochet, and run in upon your lead by it, there is at high water three fathom, and at low water no more then one fathom. The Rettires is a stony bancke, lying in the midst of the River of Seine, lying over towards the point of Honfleur, at low water it falleth at some places drie, at halfe flood it is to the southwards three fathom, but to the northwards 2 fathom deep. When the land of Caen is without the point of Seynhead, and you saile then with it, south on, then you runne to the westwards off it, or alongst without it. Or else, if you keepe Struyfaert a handspikes length without the point of Seynhead, then you runne also without it. When the easter gate of New haven commeth over the easter head, and the easter mill, and saile then so on, keeping them so, then you runne in right to the northwards of the Rettiers, and also you can take no hurt of the banck that lieth towards Seynhead. At Habell or New-Haven men must goe in at a high water, and within lye everie tyde drie.

The river of Seine must be sailed into upon the tide, when the most, or the strongest off the flood is spent, then you may saile alongst by the land upon your lead, untill you may see in open into the river of New-haven, when then the souther Castle commeth over the easter-head, and the mill; run then right in upon it, but it is best to anchor halfe wayes betwixt the Castle and Seynhead, and there to stay for a Pilot: If there come none of, then saile from thence right wit the Castle that standeth upon the head, there it is deepest water.

To saile from Newhaven upwards, towards Roan, is not well to be done without a Pilot, you must goe with the tyde through the first travaille or banckes, which lie from New-Haven to Honfleur southeast, alongst by southerland, and from thence alongst the north side of the River to Quillebeuf, being come there, you are through the first travaillie. You must also bee well advised, and take good heed for the strong spring by the Normans, called La barre, which everie tyde commeth on so strong with the flood, that ankors and cable have enough to doe to hold a ship: For that and other dangers more, it is not good nor convenient to saile up the river without a Pilot.

Two great leagues to the southwards of the river of Roan, Tochet. lieth a Tydehaven, called Tochet, on the west side of the entry standeth a beacon, by it you must go in, or you may found it in by the Easter-shoare. Southwest, or Southwest and by south from the point of Seynhead, about six or seven leagues off, lie many bankes, a good wayes in sea, you may saile on both sides off them (as well to the eastwards as to the westwards) into the Fosse off Caen, which lieth in most south, Fosse off Caen. and lieth in a Baye. At the west side lieth a chindle, where men may ride within it, it is wyde and broade, and sandy strand, the east land is sand hills and farre flat in fixe and seven fathom, there men may goe in, sounding with the sounding pole.

From Seynhead to Cape de Barfleur, or Cape de Schierborough. C. Schierborough. rough, the course is west nineteene leagues. About foure leagues to the eastwards off it lye the Ilands of S. Marques, men may

The second part
THE SECOND BOOK
OF THE
FIERIE SEA-COLVMNE,

WHEREIN

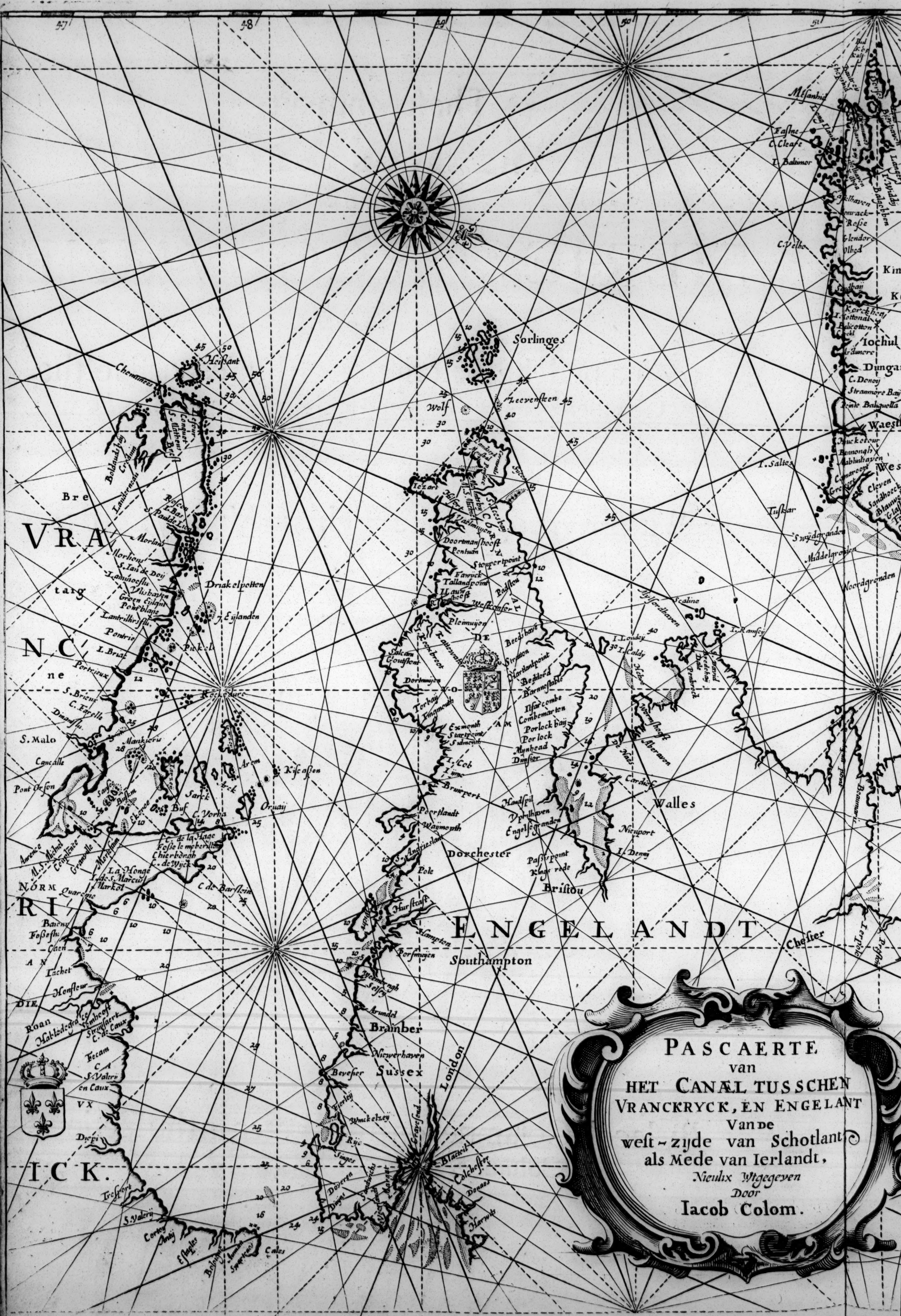
Is contained the Description of the Seacoasts of the
Channell between England and France; and likewise
the Sea-coast of Ireland.

With priviledge of the High and Mighty Lords,
the States Generall, for twelve yeares.



Printed at Amsterdam,

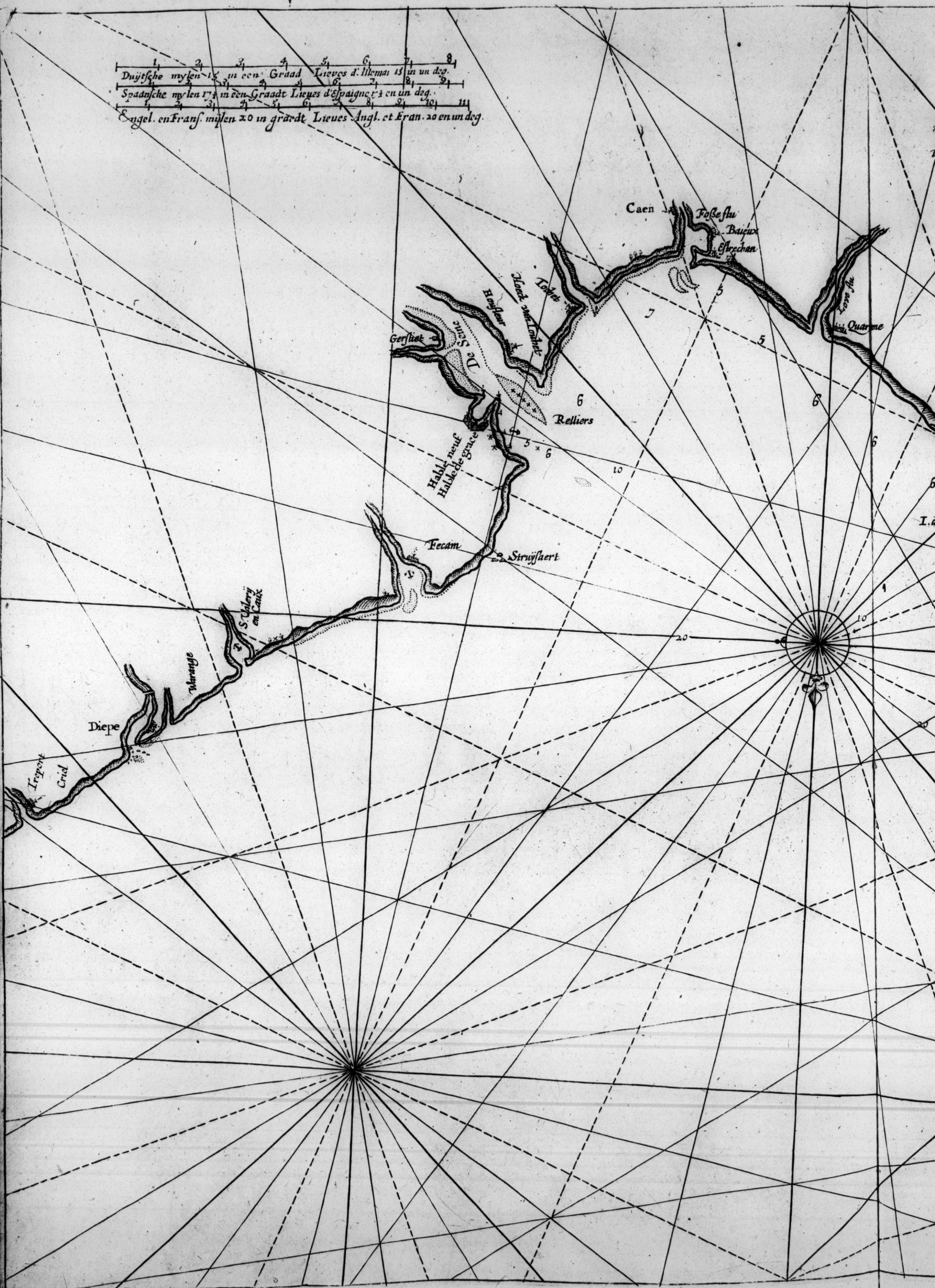
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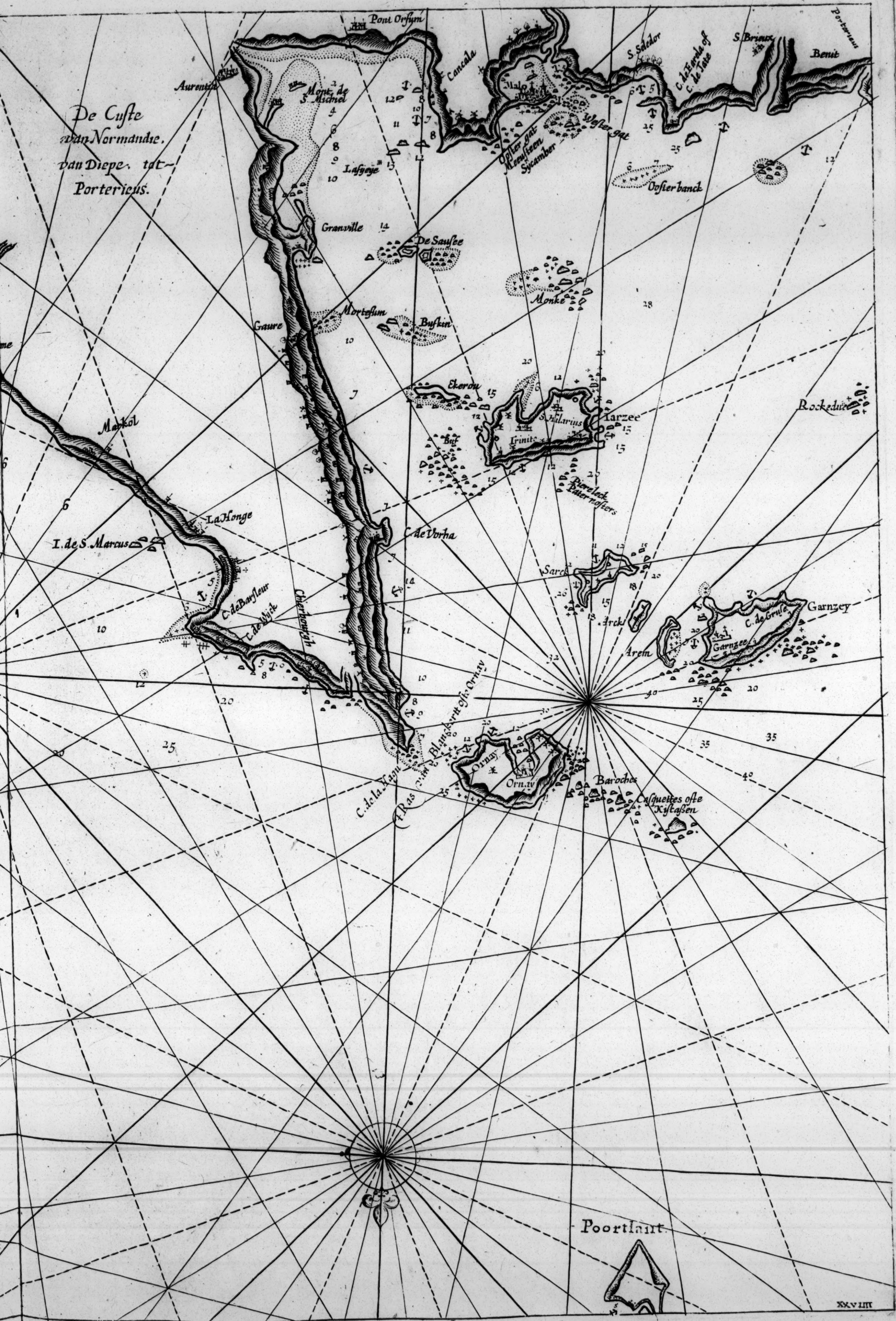
PASCAERTE
van
HET CANAL TUSSEN
VRANCKRYCK, EN ENGELANT
Van de
west-zijde van Schotland
als Mede van Ierlandt,
Nieuix Witgegeven
Door
Iacob Colom.



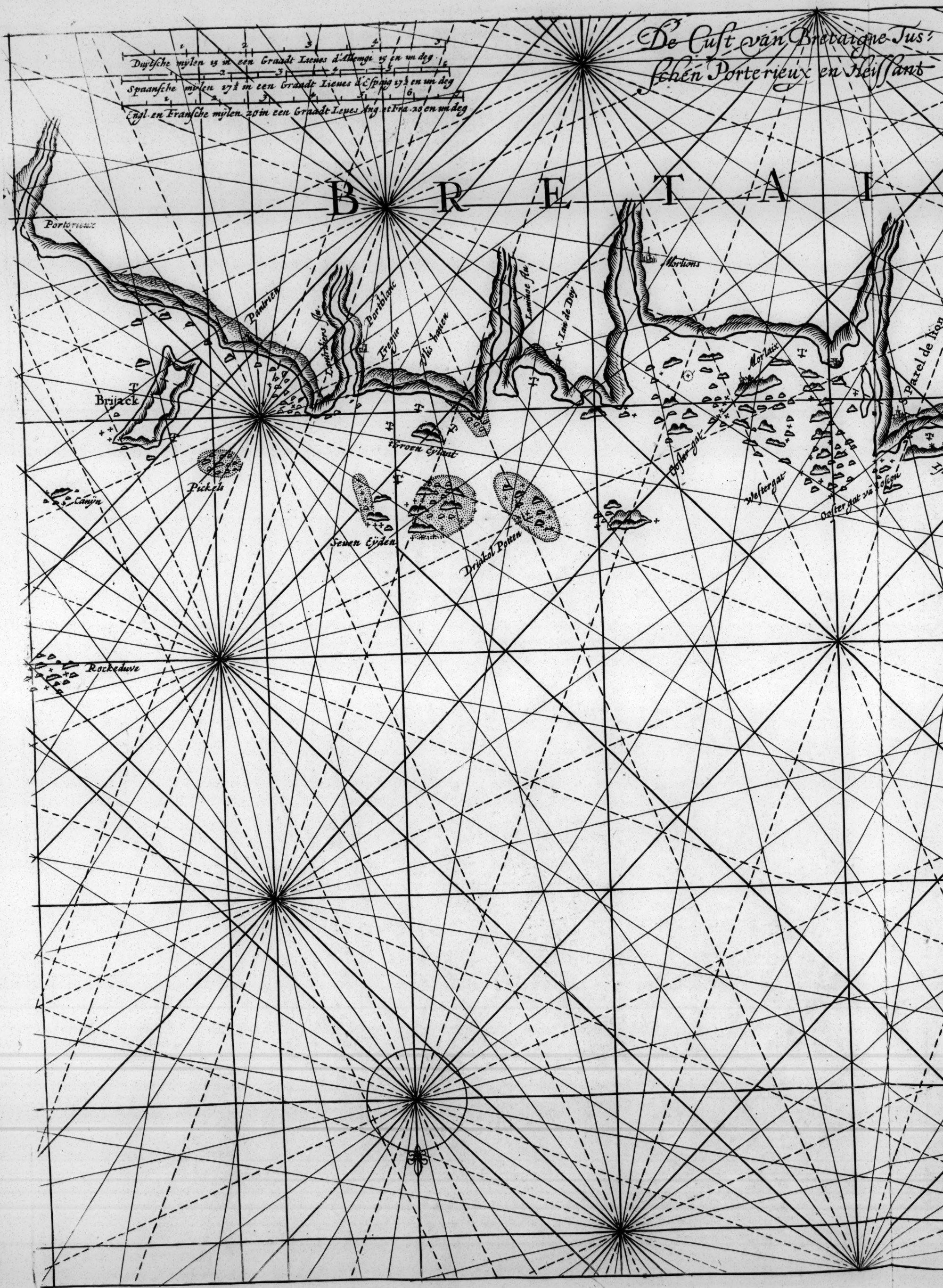
1 2 3 4 5 6 7 8
 Duijsche mylen 15 in een Graad Lieues d'Allemagne 15 in un deg.
 Spaansche mylen 17 1/2 in een Graad Lieues d'Espaigne 17 1/2 en un deg.
 Engel. en Frans. mylen 20 in graadt Lieues Angl. et Fran. 20 en un deg.

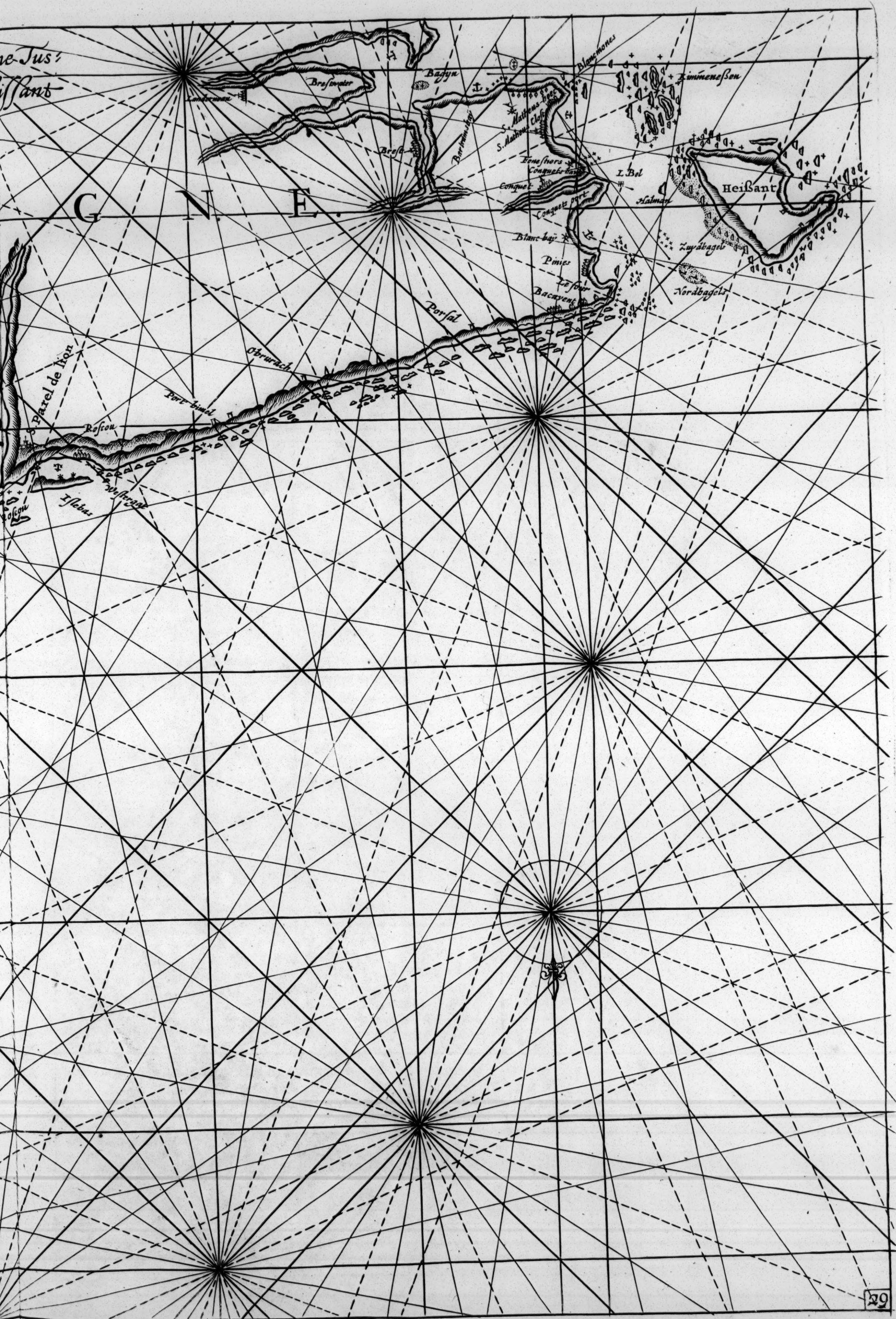


De Cufte
van Normandie.
van Diepe. tot
Porterieus.



Poortlant.





S. Ma
La Ho

Sunch
rock.

C. de v

Cape o
Hage.
Ornay.
The Ka
of blan
kert.

Kaskets.

Barroche

Roan un
der Gar
sey.

may saile round about them, but it is not there very cleane. A league to the westwards of the Iland of S. Marcus lyeth a Honge a flat tower, to the westwards of it lieth the point of Barfleur, betwixt both is a great baye, where men may lie in 6 or 7 fathom land-lockt for a northnorthwest winde. A northeast winde bloweth there open in.

From the north-point or C. de Barfleur (which lyeth north-northwest from you, when you lye in the road) lieth of a banck or litle riffe, yet a shippe may go over it. Northeast a league and a half of from the foresaid point lieth a rock under water, where shippes may not goe over.

From C. de Barfleur to Schierborough it is west and west-northwest foure leagues, that is a litle Tyde-haven. To the westwards off the point of Barfleur lye some foule grounds, if you keepe the high land of Schierbrough with one the Cape de Wyck, you shall not come to neare them.

Before Cape de Wyck is a good roade in six fathom, a litle to the eastwards off the two high rockes in a sandbay.

Before Schierboroug lye some rockes, or litle Ilands, which are cleane round about, to the westwards off it lyeth a Tyde-haven, called the Fosse off Moberille, before it on both sides lie 4 or 5 high rockes, at high water men runne through betwixt them, and so into the Haven. A great league and a halfe to the westwards off it, lieth Cape de Hague,

Two leagues west and by north from Cape de Hague, lieth the Iland Aldernay or Ornay, betwixt them goeth the Race of blancker through. Aldernay or Ornay is about three leagues long, and lieth east and west. The east end is cleane, men may saile reasonable close alongst by it, but the west end is very foule: There lie some litle Ilands close by the west end, being passed them, men may sayle towards Jarsey without any feare.

To the southwards of the foresaid litle Ilands at the west end lieth of a ledge of rockes, within it, on the south side it is cleane, except at the south point, that is also foule. Hee that will ankor on the south side of Ornay, must be mindfull thereof, and ankor a litle to the eastwards of the Tydehaven.

From the west end of Ornay lieth a great multitude of rockes west and by north, and westnorthwest of three leagues into the sea.

Upon the outtermoist and westermoist end, lyeth a great high rockes with many other smaller rockes about it. Halfe wayes betwixt this great rocke and Ornay lieth another great rock, but not so high as the foresaid westermoist, from it lye of a multitude of rocks towards the outermoist, which fall dry at low water, but at high water many lye under water. These two great rockes are called by the French Les Casquettes, and by the Dutch the Kiskaffen, and by the English the Caskets. Close by the west end of Ornay, towards the Caskets, lie other two great ranes of rockes, called the Barroches.

From the east point of Ornay to the east end of Garnsey (about to the southwards of Ornay) the course is westsouthwest, seven leagues; but from the Caskets to the west end of Garnsey southwest and by south, 7 leagues.

If you will ankor under Garnsey (comming from the Caskets) then runne on to the northeast point of Garnsey, and so for to the eastwards of it, untill you get sight of the castle that standeth upon the rock on the east side of Garnsey. Or if you come about to the westwards of the Caskets, then goe on southeast, or somewhat more southerly, untill the northeast point of Garnsey be south and by west from you, saile then towards it, you shal come in sight off that foresaid castle upon the rocke. Bring that over the south point off Garnsey, and saile in upon that marke, betwixt the Iland Arck, or Harm, and Garnsey, untill you come by the foresaid Castle, betwixt these Ilands it is on both sides full of rockes, whereof you must take good heed, especially on the larboard side towards Arck. When you are come by the castle, you may ankor within or without it, where you please, without the Castle in 12 or 13 fathom, or within the Castle (that is bewixt the Castle and Garnsey) in six or seven fathom at low water, it doth flow there six or seven fathom up and downe, which men must reckon upon.

Under the south side of Garnsey men may ryde for north-west, north, and northeast windes. If you come from the west, or from the Caskets, you must runne close about by the south-west point, called C. de Gruse; and alongst by the south side of the Iland, well halfe wayes the Iland, & ankor there where you think good, in eightene or nineteen fathom. If the wind shift to the southwest, or to the westsouthwest, then you may runne about by the south point unto the foresaid Castle, and ankor there either without or within it, as here before is

said. From the foresaid south point, lieth off a litle ledge off rocks, whereof some rockes lye above, and some under water, that you must avoid when you saile about by it.

South and by west, and southsouthwest about eight leagues. Rockedun From Garnsey lieth a great ledge of rockes, more then a league great, called Rockedunes.

About 2 leagues east from Garnsey lieth the Iland Sarck, Sarck, there men may ankor round about it in five and twenty, six and twenty, and seven and twenty fathom. From the north end lye off some Rocks, whereof some lye above, and some under water. At the south end of lye also some rockes, but all above water.

Betwixt Garnsey and Sarck lye two other litle Ilands, Arck and Arck, or Harm, there men may saile through betwixt them.

The Iland Jarsey lieth from Garnsey southeast distant 7 leagues, round about this Iland are good roades at divers places. All alongst the north side men may ankor in 10 and 11 fathom.

At the same north side, somewhat within the west point, lye some great rockes, a good wayes off from the shoare, called the Pater noisters, or Pierreleg. At the southwest point lye many rockes which lye of a great wayes into the sea, to the northwards of them, to wit, betwixt them and the westermoist point, at the west side of Jarsey men may ankor at divers places in ten, eleven and twelve fathom. At the southside of Jarsey is also a good road for a northwest and west northwest windes. At the east side lieth S. Catherines baye, there also a very good road for westerly windes.

The west end of Jarsey and S. Malloes, or the Iland Sifember before S. Malloes lie southsoutheast, and northnorthwest, eight or nine leagues a sunder. About halfe wayes betwixt both right in the fareway, lye a great number off high rockes together, which containe in circuit in sailing about, seven or eight leagues, called the Mankiers, they lie farre towards Jarsey, some above and many under water, so that is not without great danger to runne through betwixt Jarsey and the Mankiers.

When men will saile through the Race of blanckert, bound for S. Malloes, they run commonly through betwixt Sarck and Jarsey, men may also saile to the eastwards of all the Ilands and shoulds alongst the coast of Normandy, towards S. Malloes in manner as followeth.

When men come a litle past the C. Voorha, they shall meet (thwart of the Iland Jarsey) with three or foure high rockes, called Le Beuf, men may runne to the westwards of them, and so through betwixt them and the Iland Jarsey, or els to the eastwards of them alongst by the main land, upon as they will, towards the riffe of Mortefaim, that lieth upon the coast of Normandy southsoutheast, 8 leagues from Cape de Voorha.

Over against, or thwart of the Riffe of Mortefaim, lieth a rane off rockes lying east and west more then a league in length called Beuf kin, at the east end many of them lie above, and at the west end most of them lie under water. Men must saile throug betwixt them and the riffe of Mortefaim that are bound Granville.

Betwixt the foresaid rockes Beuf and Beuf kin, lieth another great rane of rockes, called Enckerou, which lie off from the southeast point of Jarsey towards Granville; you must leave all these rockes on the starboard side, and run alongst to the eastwards of them.

From the riffe off Mortefaim to Granville, the course is southsoutheast, and from Buf kin southeast 4 leagues.

Cape de Voorha and Granville are two points that lie with out the other land. About the south point of Granville lie two or three litle rockes, along by them men must run in within a Pier or head, where the ships lie dry at low water. Betwixt cape de Hague, and Granville, men may see upon the land many litle houses, mills, and trees, as they saile alongst by it. A litle to the southwards off the riffe Mortefaim standes a Church with two steeples, called Quotanse. All alongst this whole coast is every where good anckering in sixe or seven fathom, especially a litle to the southwards of Cape de Hague.

About two leagues west from the point off Granville lyeth another great rane of rockes two great leagues long, lying east and west, called La Shausee, betwixt them and the point of Granville men must saile through that are bound for Con-calle or S. Malloes.

About five leagues to the southwards off Granville, in a great baye, lieth an Iland before the river off Avrantrie, about a league without the land, called Mount de S. Michiel, upon it lieth a Castle, or litle towne, called S. Michiel, with a high Tower

S. Marcus la Honge.

Sunken rock.

C. de Wyck

Cape de Hague. Ornay. The Race of blanckert.

Caskets. Barroches

Roan under Gainsey.

Arck and Arck.

Pater noisters.

S. Catherines bay

Mankiers Rockes.

Le Beuf.

Enckerou.

Granville

La Shausee

Mount de S. Michiel.

Tower which men may see at sea. This Bay is to the southwards of Granville, within the rocks of Concalles, very flat and rising ground, from thirteene, tenne, eight, fixe and foure fathom to one fathom, so that at low water the Bay falleth so farre drye, that from the strand men see no sea nor water.

From Granville to the point off Concalles, the course is southwest 5 leagues, from that eastwards lye three rockes, under which men may anchor in ten fathom. For to saile to the towne men must runne betwixt the point and the foresaid rockes. It is betwixt them both eight and nine fathom deepe. Before the towne it is shoulder water. To the northwards of the Towne lye other two rockes, there men may also anchor under in 5 and 6 fathom water.

From the outermost rockes by the point of Concalles untill you come before S. Malloes, the course is west, and west and by south 5 leagues.

S. Malloes
Sisember.

Before the haven of S. Malloes, lyeth an Iland, called Sisember, upon the west end thereof standeth a mill, and upon the east end a Church with some litle houses being a Friery, coming out off the sea, you can but even scarce see the Church, but being within the Iland, you may see it better, because it standeth on the south-side off the Iland. A great shot off a cast peece to the eastwards off Sisember, lyeth a great high rock, called the Meuwestone: betwixt them and Sisember it is all full off rockes and stones, which at high water lye most under water: there is a litle channel betwixt them both, which the French men use with theyr small shipping, through betwixt the rockes, but is not to be used with great shipping, neither by them that are not very well acquainted with it.

Newstone.

Betwixt the Meuwestone, and some other rockes to the eastwards off it, lieth in a channell south and south and by east in, called la Congie. For to saile in there you must runne in close aboard to eastwards of the Meuwestone, southeast and by east right in with the towne, untill you bee gotten in two third parts of the distance (betweene the Meuwestone and the Towne) from the Meuwestone; and are one third part of the distance from the Towne, that is when the Meuwestone is twice so farre from you as the Towne, then you shal see by the northwest point of the Towne two great rockes, about a shot of a cast peece from the foresaid point, upon each rock standeth a litle house, the outermost is the smallest, and is called the little Bee, the neereft to the Towne is the greatest, and is called the great Bee, saile then towards

la Bongie.

them, and run in about them within a cables length of them, but keepe that course so long, untill that the little Tower (that standeth a litle to the southwards of the towne upon the point) come over the tower of Bore a litle to the eastwards of Saledoor, keepe them one over the other, and saile so in, unto the south end of the town, where the mills doe stand, then you shall see there upon the rocks two Beakons, run betwixt them through at high water, untill you come within the towne, at the east side, the shippes lye morred with foure cables dry at low water, two fast on the towne, and two upon the sand. Betwixt these two foresaid beacons, to the southwards of the town, and thereabouts, is the ground sharpe, rockie and stonie, therefore men must take heed not to stay there at low water, or to ground there, but within on the east side of the town it is cleane sandie ground, there may the shippes lye a ground without danger.

A litle within, or to the southwards of the foresaid rock the little Bee, men may anchor in five or fixe fathom water at low water, so that the tower of Bore cometh a litle to the eastwards of the little Tower upon the point to the southwards of the Town, that road is called by the French La Ranse, there men commonly first anchor, and stay for high water, for to goe in about to the southwards off the Towne. It floweth here at S. Malloes, and thereabouts, seven fathom up and downe with an ordinary tyde.

The Road
la Ranse.

From the west end Sisember, lye off also a great many rockes alongst to the westwards, more then a great shot off a cast peece, at the end of them goeth in the Wester-channell of S. Malloes east and by north in. For to saile in there, you must look out for a sharp little Tower, that lyeth somewhat to the northwards or to the eastwards of S. Malloes, within the land called Pellemey; when you have brought that east and by north from you, then you shall see upon the shore right against it, a great black rocke, which for Blackeressse sheweth it selfe without all the other rockes thereabouts, and thereby is very good to bee knowne: Bring that rocke and the foresaid little Tower one to the other and saile so right in untill you come thwart of the Iland Sisember, or els that the little Tower (upon the point to the southwards of the Towne) come to the tower of Bore, to the eastwards of Saledoor, saile then towards the roade of La-Ranse to the southwards of the little Bee, or els if it be high water, you may run in upon the markes, and then in about to the southwards of the Towne, as here before is said.

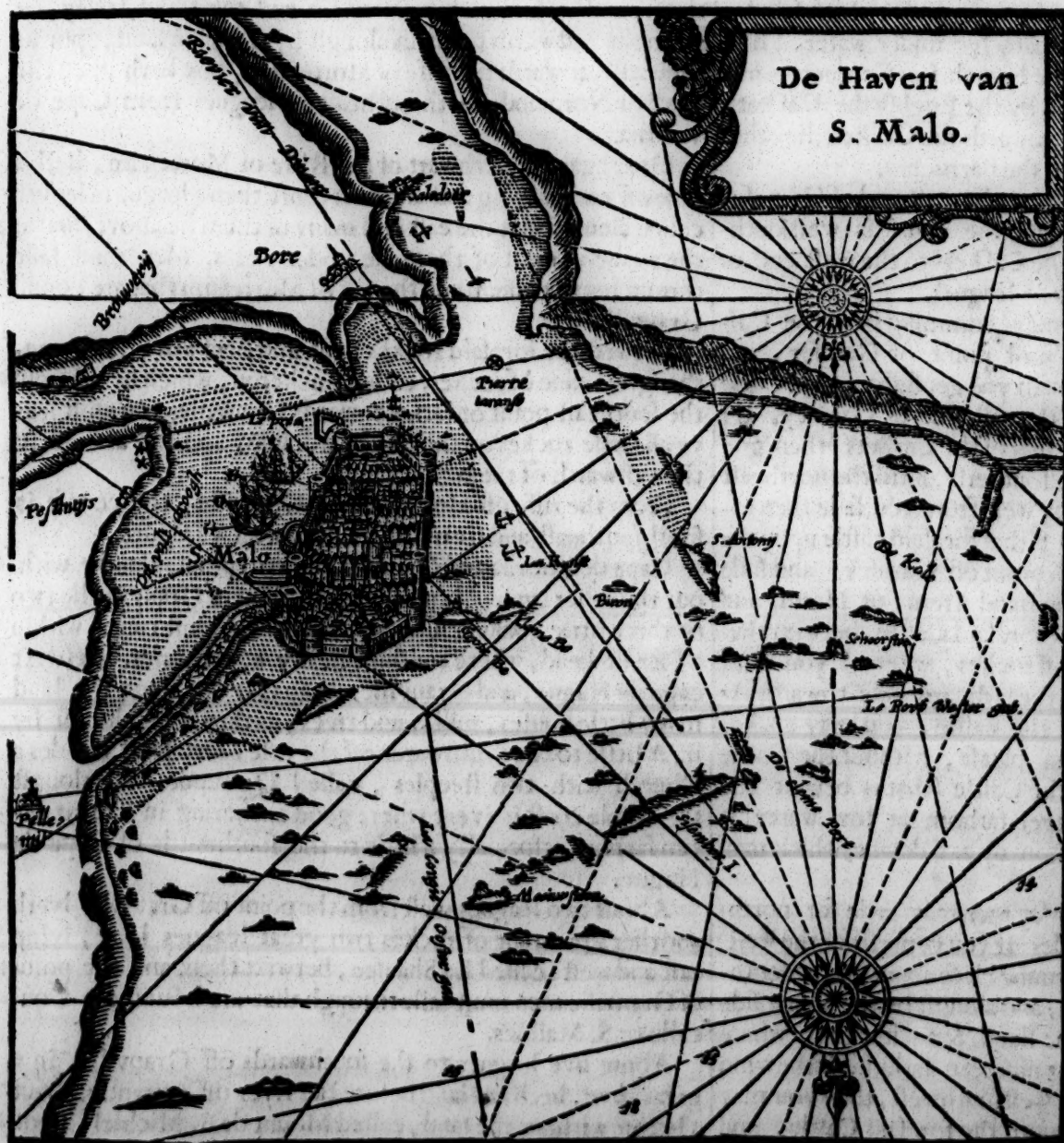
When you saile into this Wester channell, you shall leave on the starboard side a high rocke (called the Schoorsteen) with more other rockes to the westwards of it, which at high water are most of them overflowne. On the north side, that is on the larboard side, lye also many rockes, whereof many of them overflowane at high water, and also remaine above water.

Yet a souther channell lieth in by the land to the southwards off the rock off S. Antony, upon marks that men doe see a steare the ship, but it is not used but with small ships.

More, a
souther-
channell.

About halfe wayes betwixt the wester channell of S. Malloes, and C. de Farel, lyeth a stony bank under water. A litle to the westwards of C. de Farel, lieth a great rock. When you will saile from C. de Farel towards S. Malloes, & that you keepe the foresaid rock right upon the point of Farel, you shal so (without faile) saile upon the Stonebank: but if you keep the rock hidden under or behind the point, then you shal saile alongst to the

Stonebank



the southwards off it. Or else if you keepe it without the point (so that you may se through betwixt it and the point) then you shall sayle alongst to the northwards of it. The foresaid rock is a good marck for to know Cape de Farela by.

Four leagues west from S. Malloes lyeth a great Sandbay, where men may lye landlockt for all windes: Men doe anchor within a great rock, right against a mill and some trees.

C. Farela About two leagues northwest from that Sand-bay lieth the Cape de Farela, which is also called Cape de Late, after the Castle de Late, that standeth to the eastwardes off the point; there is a good Roade for west and southwest windes.

Oyster-banck Two great leagues northwest from the entry of the Haven off S. Malloes, lyeth the Oysterbanck, there under it men may anchor in 6 or 7 fathom.

Iland Briack To the westwardes of Cape de Farela unto the north-end of the Island Briack, the courte is west and by north nine or ten leagues. Two leagues from the land west from the Cape lieth a great rane of rockes above water. Between the foresaid Cape and the Island Briack lie the Havens or Rivers of S. Brioux and S. Benit.

S. Brioux & S. Benit The Island Briack is two leagues long, and lyeth southsouthwest and northnortheast, when you come from the east, you shall see two milles upon it, and betwixt them a high round hill, with a litle houle upon it: you may sayl round about this Island, and may make roades on every side where you will, although round about it here and there lye some rocks, yet it is all over good anchor-ground. A good wayes off from the northeast point lieth a rock, called Souffe, and at the north end lieth a ledge of rockes under water, whereof you must take heed.

A great league westsouthwest from Briack, three or four leagues seaboard the land, lye the out rockes, called the Picketes, men may sayle round about them also, but to the eastwardes of them towards the main land, lye many suncken rockes.

Four leagues to the westwardes of Briack lyeth the Port Blanck upon a great river, called Lantrelliers, to the eastwardes of this haven lye off many out-rockes.

Port Blanck To the westwardes of Port Blanck, lye the Sept Isles, or seven Ilands, lying from the Picketes distant five leagues east and west. A league to the southwardes off them lyeth the green land; there you may ride round about it. Between the seven Ilands you may not saile through, but to the southwardes off them, betwixt them and the Green Island goeth a broad channell through. From the easternmost Island lyeth off a fowle riffe to the southwardes, upon the outermost end off that riffe lieth a rocke, as a good marke for to saile about the riffe. Northwest from the west-end off the seven Ilands, lieth also a suncken rock, which at low water may be seene.

Greene-Iland Men may also saile alongst by the coast from Port Blanck, within to the southwardes of the Green Island, and come out againe into the sea to the westwardes: From thence northwest of into the sea, lie the Triacle Pots, these are great fearefull out-rockes, which lye spread wyde and broad west-southwest from the seven Ilands, and foure or five leagues a feat board the land.

Triacle Pots Betwixt the Triacle Pots and the seven Ilands lieth the River of Laminoe, to the westwardes of the Greene Island: For to sayl in there, men must take good heed of the northeast point, which is fowle.

R. Laminoe Thwart off the seven Ilands, upon the maine land, standeth a Church with a high steeple: called Our Lady of the Clearnesse, thereby men may know them.

Thwart off the Triacle Pots standeth also a high Tower, thereby men may know when they are neere them, but it must be very cleare weather before men can well discerne it upon the land.

Hee that commeth by night or darke weather from the Fournie, or Ushant, and is bound to Saint Malloes, let him not goe with a southerly winde, to the eastwardes off east-northeast, or northeast and by east with a westerly winde, so long untill hee hath the length of the Triacle Pots, that they bee on his broad side. The flood falleth southeast within the Triacle Pots and the seven Ilands, and should by night easily draw a ship towards them. By day, or when there is sight, there is no such danger.

Within the Triacle Pottes lyeth the tyde haven off Saint John de Doy, two leagues to the westwardes of the Green Island, and two leagues to the eastwardes of Morlions, men may sayle from thence through the rockes unto Morlions, and anchor in five and sixe fathom at low water.

To the westwardes of the Triacle Pottes lieth a great rock

the easter entry of Morlions lyeth from it southwest and by south distant two leagues, but the wester entry lyeth from it westsouthwest and west and by south foure or five leagues, that goeth in by a great long ragged rock. This entry men may saile in south, and south and by west, unto the castle off Morlaix, being about the castle they may run through the Morlaix rocks againe to the eastwardes, and runne out againe at the easter entry northnortheast, and north and by east into sea, according as the tyde shall be, the flood commeth there out of the northwest.

If a man would goe from Morlaix to Marlions, hee may goe on east through the rockes, and so saile to it: It is all broken land, and there remaineth at low water five fathom depth.

If you bee bound to S. Paul de Lion, you must run right with the great rock, with the two horns or Sadle, and so close alongst by it: being past it, edge to the land upon the strand lyeth a village, called Plempoll, sayle right with it, and alongst by it, to the eastwardes off it goeth in the river. These are all tyde-havens, but betwixt the rockes of the Morlions, and the Ilands Bay, it is at lowe water deepe enough for to save a ship.

The land of S. Paul de Lion is double land, upon S. Pauls Church stand two sharpe steeples. The Island Isle de Bas, lyeth thwart before it, upon it standeth two stakes; to see to a farre off like milles. Upon the east end of that Island lieth a very high ragged rock, when you are to the eastwardes of this rock, you shall see two sharpe steeples a space one from the other, these are the steeples of Plempoole: you may also then see the Castle of Morlaix, lyeth southeast from you, upon a high rock.

The foresaid outermost long ragged rocke of Morlaix, lyeth from the top of the Island Isle de Bas, east, and east and by south three or foure leagues. Men may sayle alongst by the maine land within and through these rocks, untill they come to the seven Ilands, they are all great bayes, where at most places is good anchor ground.

Within the Isle de Bas lieth the town of Roskow, you may sayle into the haven off Roskow at both sides off the Island.

For to saile into the easter channell, when you are passed by the high rocke with the sadle, or two hornes, called Le Taureau, and come by the land, betwixt the east point off the Island, and the point off the maine land over against it, you must saile in keeping the middle off the channell. It is in this channell seven and eight fathom deepe. Being come within the point of the Island, you must runne in about by it, west and by south, and west on, untill you come about halfe wayes within the Island, and anchor there in eight or nine fathom. And then Roskow shall lye south and south and by east from you.

If you will saile into the wester channell, you shall see to the westwardes of it, close by the maine land, two great long rockes. From the point of the maine land, a litle to the eastwardes of the easternmost long rocke, lyeth off a riffe from the land, which maketh the west side of the channell, you must runne in southeast betwixt that riffe and the west point of the Island, and when you come within the point off the Island, you must edge up northeast unto the middest of the Island, and anchor there as here before is sayd.

From Isle de Bas alongst to the Fournie or Ushant lieth the coast westsouthwest 16 leagues.

The point off Dongie Nefse lyeth from Dover southwest and by west distant 9 leagues. At the east side off the Nefse in Romans Bay, thwart off the Romans-Tower, is a good roade for west and S.W. windes: For to anchor there, runne so farre in the bay, that the point off the Nefse be south and south, and by west from you, anchor there in about 7 or 8 fathom: you may also anchor on the west side of the Nefse, for a northeast winde, so that the point lie east and by north from you.

For to saile into the Camber off Rye, coming from the west, you must keep Beachy without the point of Fairlee, and run so towards the Nefse, and being come in faire by it, run in without two cables length alongst by it, unto the end off the Nefse, then edge up to the westwardes, and leave the beacons upon the starboard side, untill you come before the castle Camier, that standeth upon the souther chindle, there you may anchor in 4 & 5 fathom: From thence along even unto the Town of Rye, it is all fet with beacons, which stand alongst by the east side of the deep, unto the Daries, which at low water fall dry, in sayling unto Rye, you must leave, all the beacons unto the starboard side, and run indifferent close alongst by them.

Off the tydes and courses off the streams.

Between Diep and Struyfaert without the land in the fareway, the flood falleth northeast and by east, and the ebb southwest and by west.

At New-haven, and in the River off Roan a southeast Moone maketh a high water.

From Struyfaert to Caen in the Fosse, the flood falleth southsouthwest, and the ebb northnortheast.

Before the have off Caen a southsoutheast maketh high water, within the haven a south and by east Moone.

At Marckell, la Honge, Barfleur, Sherborough, and C. de Hage by the shore, a south and by east moone.

From Seynhead to Barfleur, the flood falleth by the land east and by north and the ebbe west and by south. But in the channel a seaboard the land, the flood falleth away eastnortheast, and the ebbe westsouthwest.

At Cape de Hague by the shore, a S. and by E. moone maketh wigh water.

In the Race off Blankert a north and by east, and south and by west moone. The flood falleth through the Race northeast, and the ebbe fourwest.

In the Islands also a north and by east, and south and by west moone maketh a full sea. Men cannot well reckon the tydes there; because they have divers courses about the Islands, but for the most part northeast and by north. A quarter of the tyde, the flood falleth thwart into the caskets.

In Garnsey a north and by east, and south and by west moon maketh full sea.

At concalle and Granville a westnorthwest moone.

At S. Malloes an east and west moone maketh high water.

The flood falleth in there at the wester channell; and goeth out againe at the easter channell, men must reckon there upon when they will sayle into these channells.

From the Island Briack in the bay of Benit, the flood falleth southeast, but in the fareway eastfourtheast and w. N. w.

At the east-side off the Island Briack in the road southfourtheast. An east & west moon maketh there the highest water.

Between the Islands Briack and Garnsey, a westsouthwest moone maketh full sea, the flood runneth there eastfourtheast, and the ebbe westnorthwest.

On the coast, and within the caskets, the tyde runneth continually against the Sunne, so that it is there never still water.

Between Septs Isles, or the seven Islands, and Garnsey in the fareway, a westsouthwest moone maketh full sea.

Between Briack and the seven Islands, an east and by north, and west and by south moone maketh full sea. The flood falleth there east and east and by south.

Between the seven Islands and the outer rockes off Morlions, the flood falleth in southeast within the Triacle Pottes towards the Green-Island, but in the offing, east and east and by north.

At Morlaix and S. Pauls maketh highest water a west and by south Moon, but in the fareway in the offing thwart of it, a southwest and by west, and westfourwest Moone.

At the Isle de Bas maketh high water a w. and by S. moone

In the fareway there in the offing, the flood falleth E. N. E. and the ebbe w. S. w. and so likewise from thence all alongst the coast of Bretagne, unto the Fourne or Vshant.

Between Dower and Dongie Nefse, and likewise thwart of the Nefse, a S. S. moone maketh full sea.

From Dongie Nefse to Dover, the flood falleth northeast and by east, and the ebbe southwest and by west.

Of the Depths.

Before Diep, men may see the land in twenty and two and twenty fathom. About foure leagues without Struyfaert it is deep 20 fathom.

Between Diep & Seynhead stand also many sharpe towers trees and houses upon the land, Struyfaert is best to be knowne on a great rock like a high Tower, thwart of it in the fareway it is deepe 16 and 17 fathom.

About C. de Berfleur and Sherborough foure leagues from the Island, it is deepe thirty fathom.

Barfleur is a high point, below upon the white land standeth a flat Tower, two milles, and some litle houses, and to the westwards of it is more white land.

Vpon Cape de Hague standeth a Castle, with a litle turrer; a litle to the eastwards of it in the land standeth a sharp Tower, two leagues to the eastwards off it lieth Sherborough with a flat steeple.

The land Ornay is upon the west end high with a steep going down point: the east end is hilly, or wick hommocks, but lower then the west end, in sayling by it, men may see upon it a Tower or two with some milles. Vpon the north side of the Island lyeth a white hill like a sand-hill.

To the northwards of the Caskets, two leagues from land it is deep 35 and 40 fathom.

Between the Kaskets and Garnsey it is 35 and 40 fathom deep, most all stony ground.

Northwest about foure leagues from Garnsey is a pit where it is 80 or 90 fathom deepe, els it is thereabouts 40 fathom deep.

Between Ornay and Iarley it is deep 20 and 25 fathom.

In the fareway of Iarley, Rockduve and the Island briack, it is deep 20, and 25 and 30 fathom.

About the Triacle pots alongst the coast it is 45 and 50 fathom deep, in such depths men may see the land thereabouts. By night it is not good to come nearer that coast and the seven Islands, then in 4 fathom.

Thwart of S. Paul de Lion, and the Isle of bas, 5 leagues from the land it is deep 45 and 50 fathom.

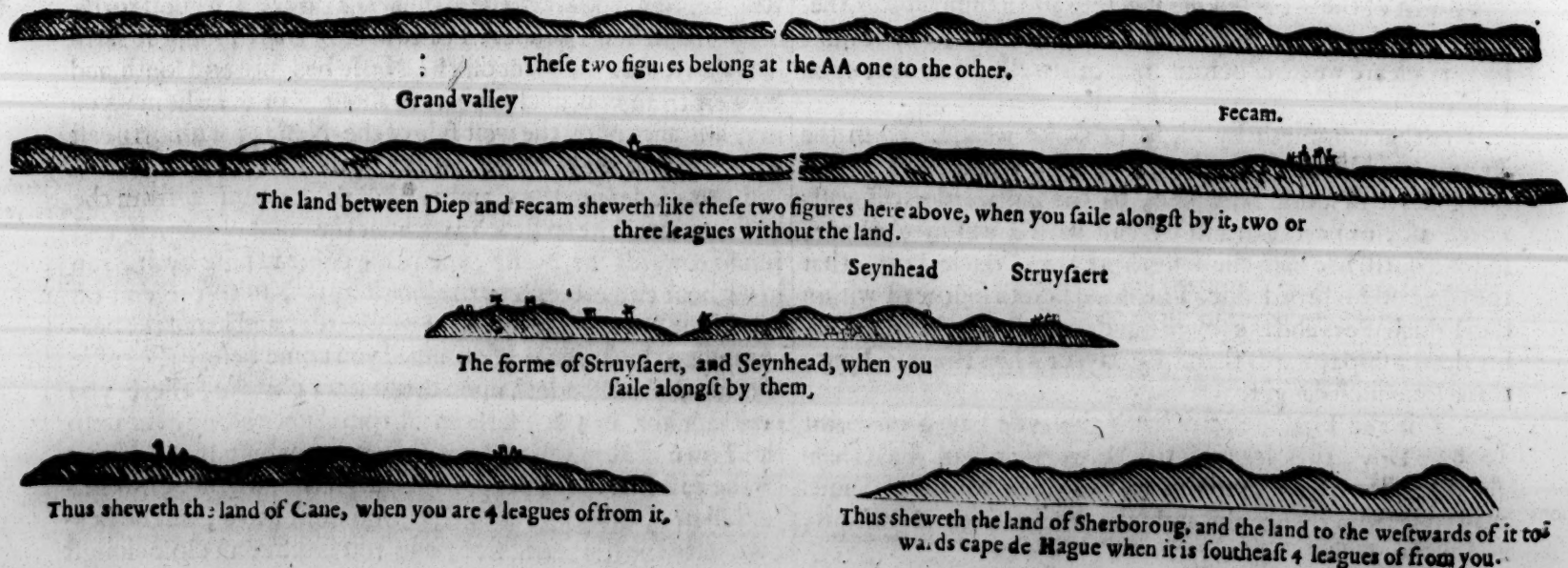
Courses and Distances.

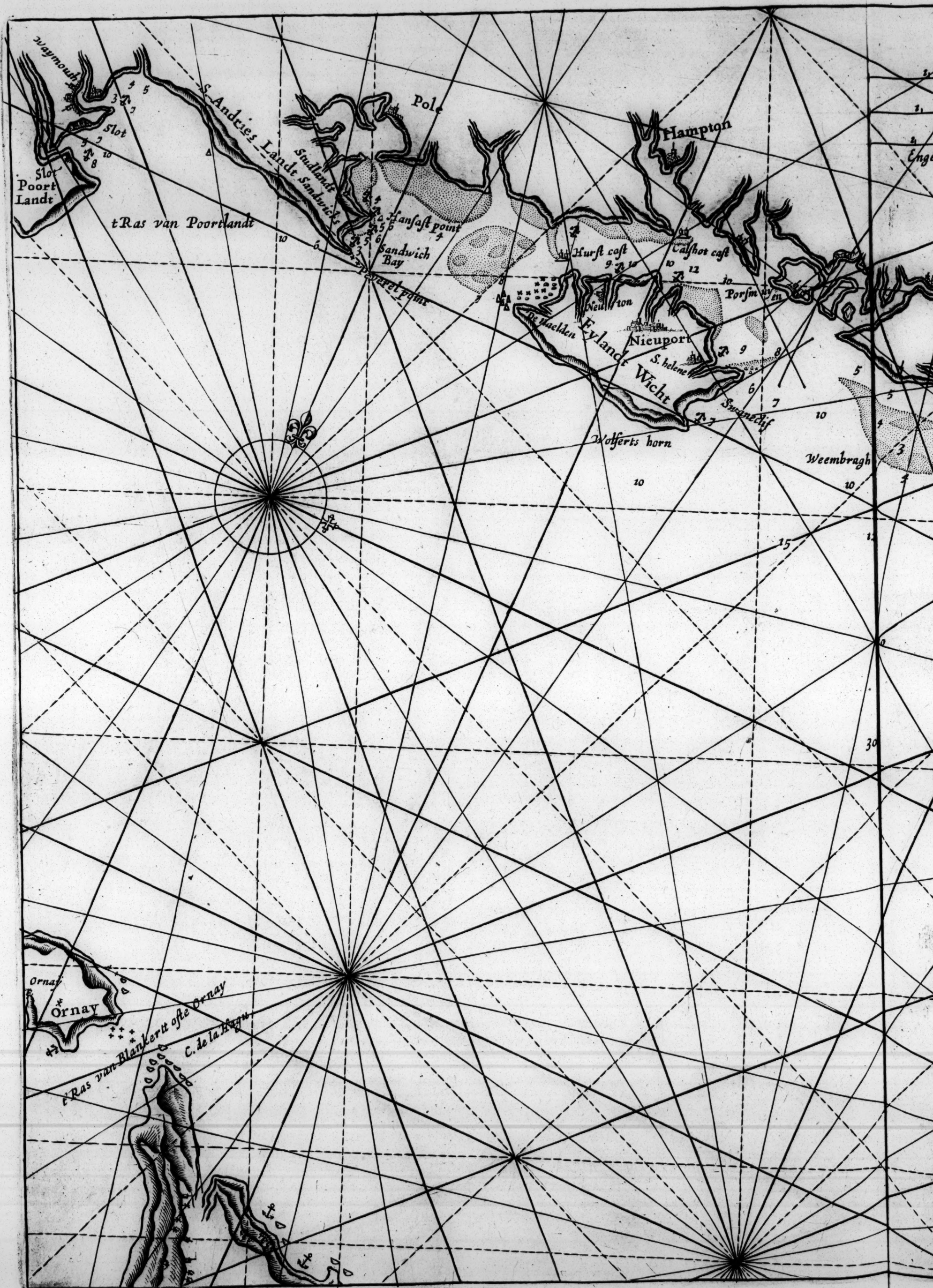
From Tresport to Diep southwest	7 leagues
From Diep to Facam w. f. w.	11 leagues
From fecam to Struyfaert f. w. and by w.	3 leagues
From Struyfaert to Seinhead, the course is f. f. w.	two great leagues
From Seynhead to Caen in the fosse, the course is f. f. w.	6 or 7 leagues
From blackneffe to Diep southsouthwest and f. w. and by south	17 leagues
From blackneffe to Struyfaert, or cape de Caux, southwest and by south, somewhat westerly	29 leagues
From blackneffe to the Caskets, the course is w. f. w.	48 leagues
From blackneffe to Wight w. somewhat southerly	37 leagues
From blackneffe to beachy w.	20 leagues
From Diep to Wight, the course is west northwest	37 leagues
From Diep to beachy northwest	21 leagues
From Diep to Dover north	twenty three or 24 leagues
From Seynhead to Diervliet, or the point of Sherburgh, west, somewhat northerly	20 leagues
From Seynhead to portland northwest and by west	38 leagues
From Struyfaert to the east end of VVight, northwest northerly	29 leagues
From Struyfaert to beachy, north	23 or 24 leagues
From Struyfaert to Fairlie, north and by east	27 leagues
From the Struyfaert to the point of Dover, the course is n. n.e.	33 leagues
From Caen to Dierfiet, or the point of barfleur n. w.	16 leagues
From Dierfiet to cape de Hague west and by north	8 leagues
From C. de Hague to the outermost of the Caskets w. and by n.	8 leagues
From the Caskets to beachy n.e. and by e.	37 leagues
From the Caskets to Wight n. e. and by n.	20 leagues
From the Caskets to portland north and by west	13 leagues
From the Caskets to the Steart w. n. w.	19 leagues
From the Caskets to Silly w. somewhat northerly	56 leagues
From cape de Hague to cape de Voorha, f. and by e.	7 leagues
From cape de Voorha to Granville f. f. e.	9 leagues
From Granville to Mount S. Michiel southsoutheast	5 leagues
From Granville to the point of Concalles, southwest	5 leagues
From the point of Concalles to the easter channell of S. Malloes west and west and by south	5 leagues
From the Island Sifember, before S. Malloes unto cape de farrele w. 4. or 5. ca.	
From C. de farrele to the Island Briack w. and by north.	9 or 10 leagues
From the Island Briack to the Pickelles w. and by south.	2 leagues
From the Pickelles to the 7 Islands, w. f. w.	5 leagues
From the 7 Islands to the Triacle Pots w. f. w.	4 leagues
From the Triacle Pots to the Ile de Bas, w. f. w.	9 leagues
From Ile de Bas Ushant w. f. w.	16 leagues
From C. de Hague to the west end of Iarley between Sark and Iarley through southsouthwest	9 leagues
From the Caskets to the w. end of Garnsey south west and by f. 5 or 6 leagues	
From Garnsey to Iarley south east and by east.	7 leagues
From Garnsey to S. Malloes south south east	16 leagues
From the south end of Iarley to S. Malloes south south east	9 or 10 leagues
From Garnsey to the rockes Rockduves, south south east	8 or 9 leagues
From Rockduves to Manckiers e. and by south.	9 or 10 leagues
From Rockduves to C. de Farella south east	10 leagues
From Rockduves to the rock Camine south and by west	4 leagues
From Rockduves to the Island briack f. and by west	5 leagues
From Garnsey to the seven Islands southwest and by south.	15 or 16 leagues
From the Caskets to S. Paul de Lion south west	29 leagues
From the Caskets to the fourne or Vshant f. w. and by west	41 leagues
From the Caskets to the Lizard, west and west and by north	37 leagues
From Garnsey to the Lizard, w. and by n.	37 leagues
From the seven Islands to the Lizard north west and by west	29 leagues
From the seven Islands to the Steart north and by west westerly,	24 leagues
From the 7 Islands to Portland north east and by north	32 leagues
From S. Paul de Lion to the Lizard north west and by north	29 leagues
From S. Paul de Lion to Steart north and by east	29 leagues
From S. Paul de Lion to Portland north east and by north	40 leagues
From Dover to Dongie Nefse south west and by w.	9 leagues
From the Nefse to Pairlee, west f. w.	3 leagues

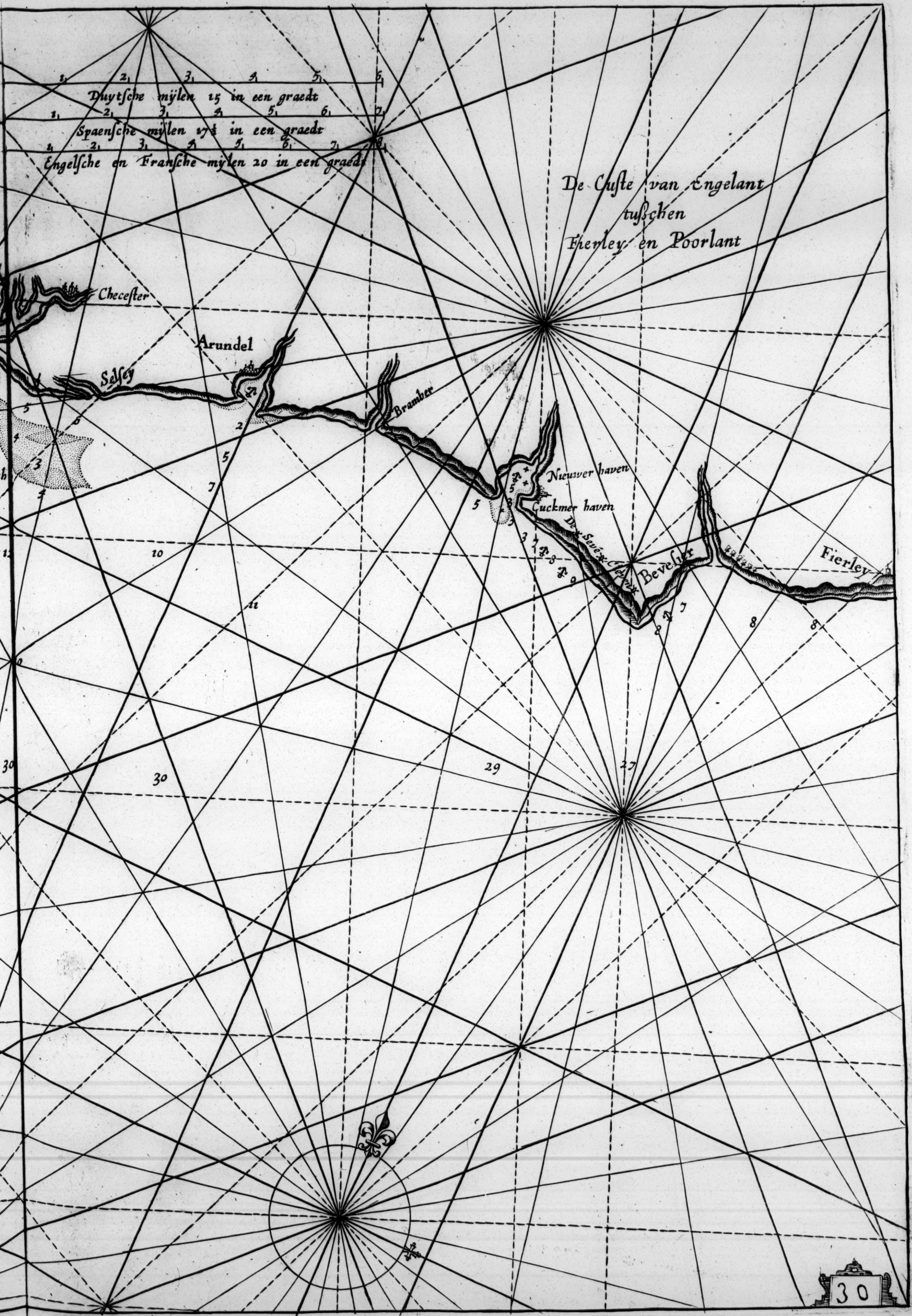
Heights.

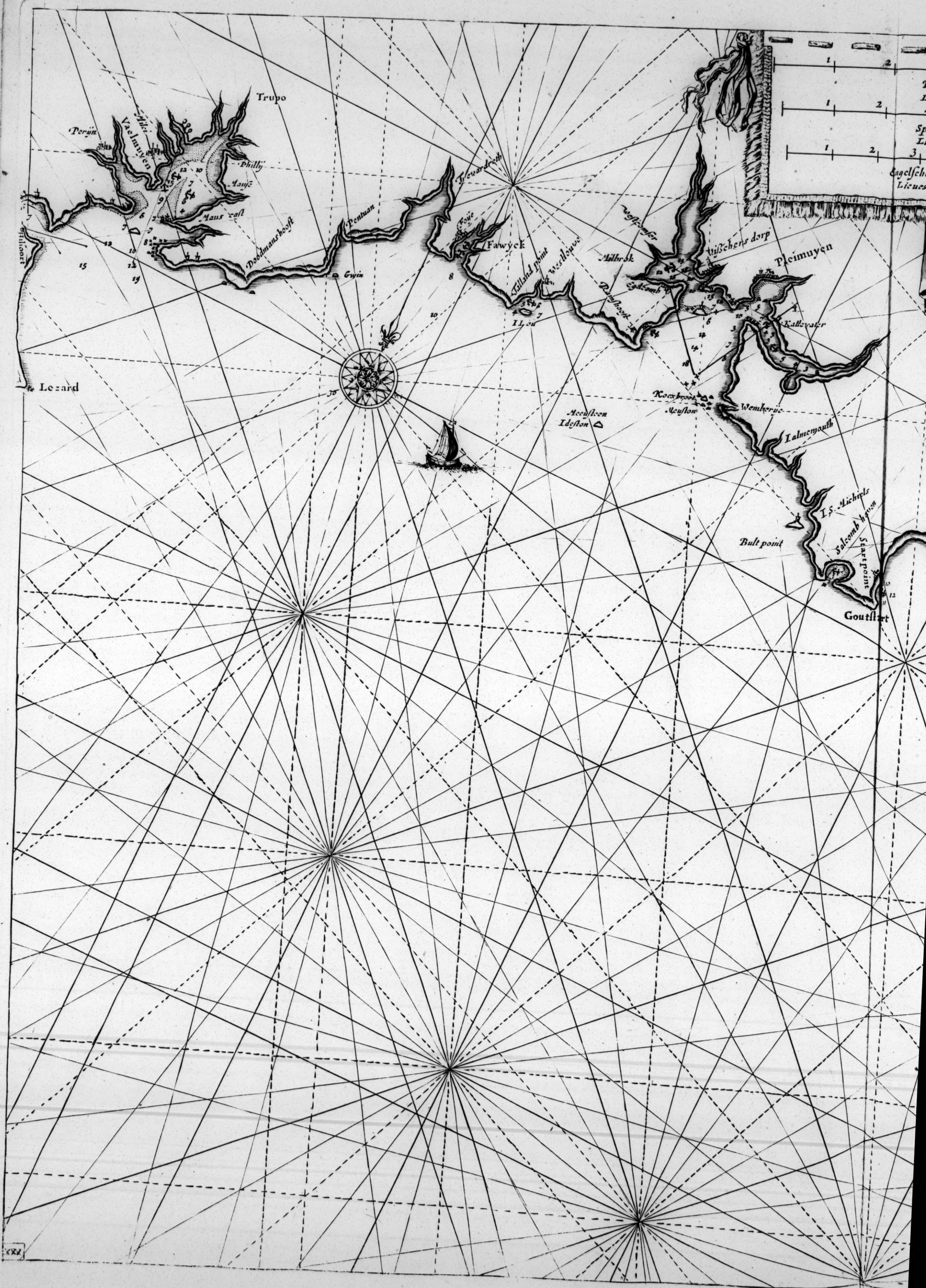
The point of Struyfaert in	45 degrees 45 minutes
The Caskets lye in	45 degrees 48 minutes
The seven Islands, or Sept Isles in	59 degrees
Beachy lyeth in	50 degrees 48 min.

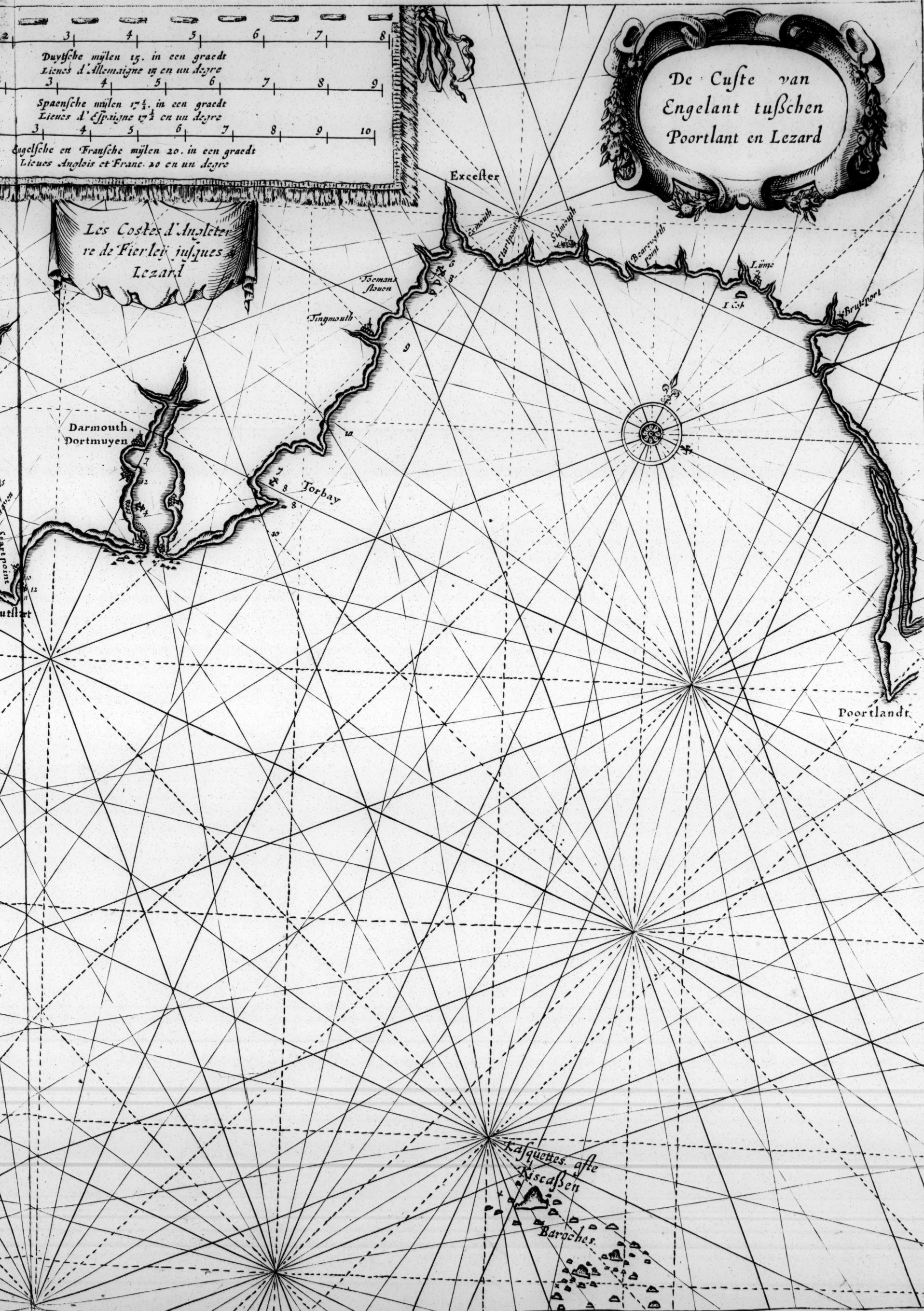
How these Lands doe shew them selves at Sea.











Duytſche mylen 15. in een graedt
Lignes d'Allemagne 15 en un degre
3 4 5 6 7 8 9

Spaenſche mylen 17½. in een graedt
Lignes d'Eſpaigne 17½ en un degre
3 4 5 6 7 8 9 10

Engelſche en Franſche mylen 20. in een graedt
Lignes Anglois et Franc. 20 en un degre

De Cufte van
Engellant tuffchen
Poortlant en Lezard

Les Costes d'Angleterre
de Fierley jufques
Lezard

Exceſter

Dartmouth
Dortmuyen

Torbay

Poortlandt

Kasquettes afte
Kiscassen
Baroches

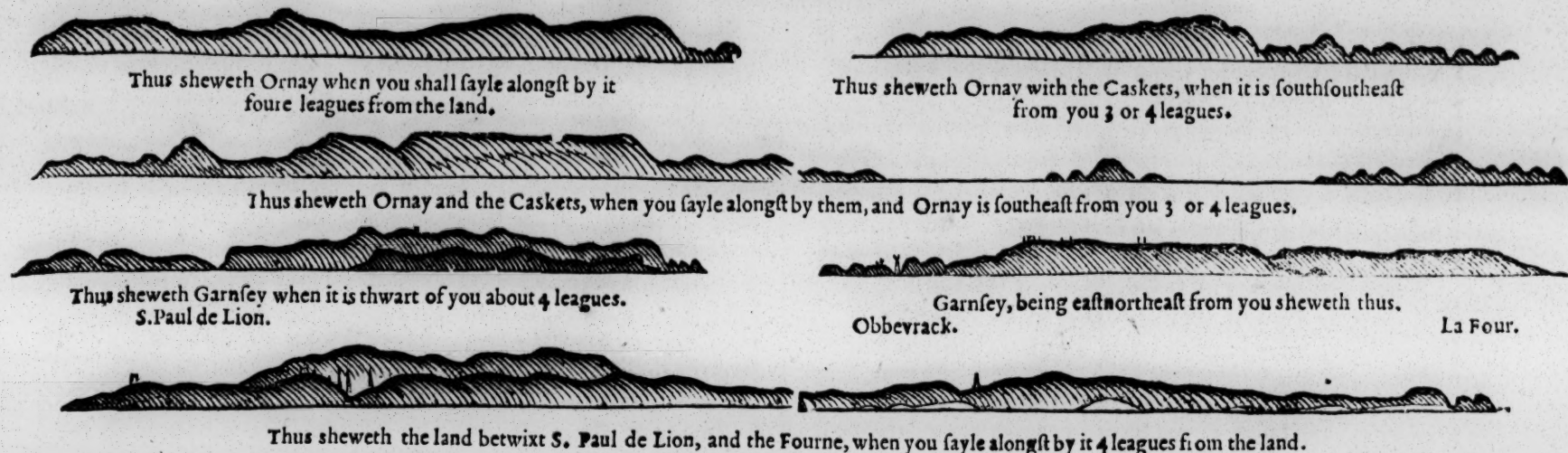
Road
der b

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R



The second demonstration,

Wherein is deciphered the coast off England from Fierley to the Lizart.

Road under beachy. H E point of the Nessle and Beachy lye westsouthwest and eastnortheast distant 8 leagues. Beachy is by the seven white Cleeves, the best knowen land that a man can see any where. To the eastwards off Beachy men may anchor for westerly windes in six or seven fathom, so that the point be south, and south and by west from you. To the westwards of the point of Beachy, thwart of the west end off the 7 Cleeves, right against the Chindle, where men run alongst by into new Haven, men may also anchor in 7, 8, or 9 fathom.

A league and a halfe to the eastwards of the point off Beachy nearest E. N. E. from the point lieth a litle sand, upon which there is at low water and spring-tydes scarce two fathom.

Newhaven At the west end of the seven Cleeves lieth the River of Cuckmer-haven, or New-haven, which hath two entries, the westermost entry lieth in by the west land, but is not to be used, but onely with very small shipping, it falleth altogether dry, the eastermost is commonly the best, and lieth northwest and by west in, there is at high water with a common tyde not more then seven, and with a spring-tyde, 14 or 15 foot water; within, the ships lye every tyde dry: But before the village they remaine a float, there they morre with foure cables fast on 2 green shores. Upon these entries men cannot well make any reckoning, they keep no certaine depth, when it bloweth a storme out of the south, they are oftentimes cast too with a chindle, and opened againe with a freshut.

Shorum. Shorum is a tyde-haven, where is at high water and spring-tydes 18 foote water, but at low water there remaineth no more then 3 foot water, so that then it floweth 15 foot up and down. With a common tyde at high water there is 12 foot, and at low water 3 foot depth. The town Shorum lieth a litle English mile within the haven, ships (that draw but 8 or 9 foot water) can lie a float a litle beneath the towne at low water, or else they lye dry every where.

When you come from the eastwards from Beachy or New-haven along by the shoare, you may see open into the Haven, before you come thwart of it: But coming from the westward, you shall not see it open before you come right before it, because the west point lieth somewhat further out then the east point. From the west point runneth off a litle tayle, but at high water you may runne in alongst over it, otherwise you must runne in by the east shore. Upon the east point stand two beacons, which you must bring one in the other, and run in so right with them, untill you come by the north shore, and then in alongst by the foresaid north shore.

Arundell. At Shorum somtimes there are builded many great ships of 3 or 400 tunnes.

About 8 leag. to the westwards off New-haven lieth Arundell, a tyde haven, where a ship may go in at half Flood, you must go in thereby the west land northeast in. In the entry it is two, and betwixt the two lands 3 fathom deep at high water: but within the haven remaineth at low water 4 and 5 fathom: There you must anchor before the village.

Owen. Five leagues W.S.W. from Arundell, and 13 leagues west and by south somewhat westerly from Beachy, lye the bancks or showlds of the Owers under water, a great league and a halfe seaboard the land.

Eastboz About 2 leagues E.N.E. somewhat easterly from the south side of the Owers, and two litle leagues south from Arundell lieth a showld of rocks and chindles, called Fast-borough-

head, as great as an aker of land, which falleth (at low water and spring-tide) dry, otherwise it commeth not above water, close to it, it is 15 fathom deep. They that sayle off from the haven of Shorum, and are bound to the westwards, must not go more westerly then S.S.W. untill they come in 18 fathom, before they set their course more westerly, for feare of this should. About an English mile N. W. from this foresaid showld, lieth also a sunken rock, whereupon at low water it is no more then 5 or 6 foot water.

About halfe waies, betwixt Arundell and Selfey, runneth off a ledge off Rocks thwart to the southwards from the shoare about an English mile and a halfe into the sea, called the Boggers, whereof some of the rocks fall dry at low water, but the outermost are alwaies under water.

The showldes or bankes of the Owers, lie about 4 leagues to the eastwards of Wight, and lie off a league and a halfe from the land, thwart of them standeth a tower in the land, when that is north northwest from you, then are you thwart off the southermost part off the showld; And if you keep the Culver cliffe off Wight west and by north, and westnorthwest from you, coming either from the east or from the west, you can take no hurt of the Owers, you may run alongst by them in twelve fathom upon your lead, without danger. If you saile away from the east end off Wight, east and by north, and east-northeast, you shall run in 12 fathom alongst over the east end of them. He that is there well acquainted, may also saile to the N. wards of them, through betweene the land and the Owers.

Betwixt the Owers and Portsmouth goeth in a great sound or haven, within lieth the town of Chichester.

At both the sides of the Island Wight men may saile within it, and there come to anchor either under S. Ellens, or before Newport where they will.

For to saile into the eastwards off Wight you must bring the easter castle that lieth to the eastwards of Portsmouth over the Lyme-kill (that is, a white spot in the land to the northwards off that Castle) and keepe them so one over the other, untill that the Culver cliffe come within or under the northeast point off Wight. Then bring the Limekill over the east end off Portsmouth, and keep them so untill that the castle to the westwards of Portsmouth come to the wood: Thus doing you shall not come nearer neither plate nor sand, to take any hurt off them, and you shall come so by litle, and litle, before S. Ellens Church. When the Church come two ships length within the red point; then you shall not come too neare the riffe at the point. Or else if you cannot see the Lyme-kill, then keepe the Castle to the westwards of the Culver cliffe, untill that S. Ellens Church come a shippes length without the point of the Island, goe then boldly northwest in, and you shall not come too neare the riffe; And then bring the square Tower betwixt the east end of Portsmouth, and the Castle: when the castle to the westwards of Portsmouth commeth to the east side of the wood, then you shall not (as here before is said) come too neare neither the plate nor the sand to take any hurt off them.

When the eastermost white spot standeth a ships length to the westwards of the castle, then you are to the eastwards of the riffe; and when the Culver cliffe is covered or hidden behind the northeast point off the Island, then are you also within the riffe. The markes off the litle plate are these: there standeth a square tower within the land, and a castle on the water side to the E. wards of Portsmouth, thwart from it lieth the foresaid, Lime-kill: when that commeth to the E. wards of the

the foresaid Castle, so that you may even see through betwixt them both, then are you upon the little plate which at low water is not deeper then 10 foot: then standeth the castle to the westwards off Portsmouth at the west side of the wood. But when the foresaid square tower commeth to the west side to the foot of the Castle and the Castle by wost Portsmouth to the west side of the Wood, there it is deepe at low water upon the little plate 12 foot.

When the square Tower standeth betwixt the east end off Portsmouth, and the castle even betwixt the Lyme-pit and the Tower, and the Castle by west Portsmouth in the west side of the wood, there it is at high water, tenne fathom deepe.

When Saint Ellens Church lyeth south west and by west from you, then lyeth southeast end of the plate northeast and by north from you, and the west end north and by east.

Nomans-
and.

From the point off the Roade of Newport eastwards lieth a broad sand alongst the shoare; called Nomans-land, which falleth almost dry at low water, it is so steepe, that halfe a cables length off from it, it is twelve fathom deepe: upon the high land of Wight thereabouts stand two or three milles. If you come neare the shore, that the foresaid milles bee hidden behinde the foresaid high land, you shall not misse to come a ground against that foresaid sand, but so long as you can see these milles, you shall goe cleare of it.

The Bram-
bles.

The Roade off the Cowes is the best Roade in Wight. Over against, betwixt that and Calshot Castle, lyeth a hard sand nearest the north shoare, lying from thence to the westwards alongst the fareway, almost so farre as thwart off Newton, called the Brambles; at low water and spring-tydes it falleth almost, dry and then the sea breaketh much upon it: to the northwards of it goeth also a channell through, but it is not to be used, but with small shipping.

For to say
in at the
Needles.

For to saile in at the west end of Wight, you must runne right in with the Needles, (they are high sharpe Rockes a Maestes lying at the West end of Wight) bring then the innermost point off Wight; or the Castle that standeth upon the chindle over against that point, called Hus castle a little without, or to the northwards of the Needles, saile in thereupon, untill you come to the Needles, leave them then on the starboard side of you, and run in within a cables length alongst by them for to avoid the bancks which lye off from the chindle to the northwards of the Needles, of the west end of Wight almost to the Needles. Betwixt the banckes called the Swingels, and the Needles, it is not very broad, and at low water 5 fathom deep. When you saile in here, you must cast your rydes well. The fore-flood falleth strong upon the banckes. When you are then come within the Needles, then edge a little more off from the shoare unto Hus Castle that standeth upon the Chindle, for to avoid some Rockes which lie alongst by the land under Water. Being come within the Castle or Chindle, there it is wyde and broad, leave two third parts off channell on larboard side, and one third part on the starboard side, saile so in untill you come before the village Newton, and anchor there in nine or ten fathom, or else saile forth) if you will) about the point off the Cowes, and anchor there before the haven of Newport in tenne or twelve fathom, there is the best Roade, and, the best lying of all the Roades in Wight. The Haven or Roade before Newport lyeth from the foresaid Hus Castle upon the Chindle northeast and by east, and eastnortheast about two leagues a sunder.

Peverel
point sand
wich bay.

From the Needles of Wight west and by south about three leagues, lieth the point of Saint Albons-land, called Peverel point, from it lye off some little Rockes to the eastwards. A little to the northwards off that point is a Baye called the Bay of Sandwich, there is a good road for them that are bound to the westwards; If you will goe to ryde there coming from the Westwards, you may take the sounding of Saint Albons land, and runne aboard the point 11. foure or five fathom at a halfe flood, and you shall take no hurt of those little roches. Being gotten about the point, edge by it up to the westwards towards Sandwich. A little to the Northwards of Sandwich in the Baye, lieth round Hommock, & thwart off it somewhat within the land standeth a mill; bring that mill to the south side of the round Hommock, and saile soo in untill you come in foure or three fathom, and anchor there so deepe or should as you will, there it is good lying for southwest or southsouthwest winds.

A little league north and by east from the foresaid point, right west from the Needles off Wight, lyeth another point, called Hanfast point, to the northwards of it lieth a little Towne, called Studland, before it is also a good roade. Upon the outermost part off that point, is a hole through the land,

where men may see through, and a little without the point standeth a high steepe rocke like a Malt, almost like the Needle at the west end of Wight. For to come to ride before Studland: you must saile about the second point, with the hole or the steepe rocke, in foure or five fathom, and goe in W. N. W. towards Studland: a litle to the southwards of it lieth a little valley, bring that W. S. W. from you, and goe towards the shoare, in foure or three fathom and a halfe, there is the best roade, & lying there, you may see the foresaid hole in the point.

A league to the northwards of that foresaid point with the hole, lyeth the haven of Poole; for to saile in there, comming about the foresaid second point with the steepe rocke, you must goe on northwest, or somewhat more northerly, and then you shall right a head off you, a high flat hill, which standeth higher than the one other land thereabouts, keepe that betwixt the two shoares, and run in so right with. If you must turne toe and againe, then spare not to use your lead, and runne not further over to the westwards, then that the flat hill come to the west-land, so soone as it beginneth (as it were) to touch it, you must cast about, or else you should be fast aground: And after you have cast about, runne not further over to the eastwards, then that the foresaid high flat hill commeth even to the east sand-hill, which is a high, gray, and sharp sand-hill, lying at the East side. If you keepe these foresaid markes in this manner, you shall have there going in at halfe flood, water enough, there remaineth upon the shouldst at low water, ten and eleven foote, but it floweth there no more then five foot up and downe. It floweth there twice in a tyde. A south-east and northwest Moone maketh there full sea: Also a south & by east & north & by west Moone once more, that commeth to passe by reason off the fore-ebbe that commeth out off Wight. When you come within the entrie, go then northnortheast on, and keepe the beacons that stand on the east land on the starboard off you, and runne in different close alongst by them. The shoares are on both sides steepe, and the channell is not wide, without the channell it is should or flat. This Pilots water.

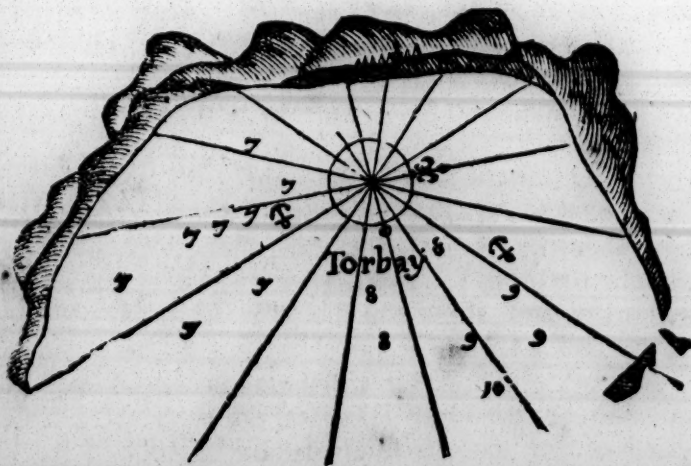
From the west end of Wight to the point of Portland, the course is W. S. W. eleven leagues, but from Dunnose, the S. W. point of Wight, west and by south thirteene leagues.

If you will goe to anchor under Portland (comming from the west, then come within two cables length, or a shot or a cast peece about by the point of Portland, and being come about the second point, edge up to the westwards untill you come before the castle, and anchor there in 7, 8, 9, 10, or 11, fathom; so that the point of Portland doe lye south and by east, and S. S. E. from you, there you shall lye land-lockt for a S. and S. by E. winde. With a southwest and a S. S. W. winde, men must be very mindfull of terrible rippeling of the race of Portland, which beginneth a little to the westwards off Portland, and endeth a little to the westwards of S. Albons. The ground in that race is also very uneven, and should, sometimes seven, otherwhiles ten, and also fifteen fathom deepe.

About a league to the northward off the road of Portland lieth a little Towne, called Waymouth, with a tyde-haven, Waymouth. before it men may anchor in 4 or 5 fathom.

From Portland to Exmouth, the course is westnorthwest thirteene leagues; betwixt them both lyeth a litle lland close by the land called Cob. Before Exmouth men may ride (at the south end of the Chindle, which lieth before the haven) in seven or eight fathom, so that the rockes of Tomanstones doe come to lye south and south and by east from you, there it is good ground, and landlockt for a south winde.

T O R B A Y.



Five leagues south and south and by west from Exmouth lyeth Torbay, and lieth from Portland west, and west and by south distant thirteene leagues.

For

For to goe into the roade of Torbay, you must bring the west point South and by east and Southsoutheast from you and anckor there in 7 or 8 fathom, you shall lye land-lockt for South and Southwest windes. At the northeast side of the bay is also a tyde-haven, before it, it is good anckor ground in foure or five fathom, according as you will lye neare or farre from the shoare.

Dartmouth.

Three or foure leagues southwards, or to the westwards off Torbay, lieth the haven of Dartmouth, which hath a narrow entry, lying in betwixt two high lands, upon each side off the haven standeth a little Castle, in time of warres they were wont to shut it over with a chaine, on the West-side standeth a little Church on the high land. For to saile in there comming from the Steart or from the westwards you must run in alongst by the Westland, so farre to the eastwards untill you bring the kay of the village (that lieth on the east side of the haven) in the midst of the entry of the haven, and saile so in, keeping the midst of the haven betwixt the two lands, and you must bee very ready with the boat (if there should come any foreflaues from of the high land) for to row in. Being come in, edge over to the West-side, before the Brewhouse, and anckor there in ten or twelve fathom, or before the village on the east-side where you please.

At the east side off the Range lieth a suncken Rock, the marckes for to avoid it are these. To the eastwards of Dartmouth is a red point, which below by the water is black, and in the red lieth a white stone, when the white stone commeth over the black point, then are you thwart of the suncken rock, but if you see the kay of the village and doe as before is said, then you shall not come to neare that suncken rock to take any hurt of it.

Betwixt Dartmouth and the steart, nearest to Dartmouth standeth a spire steeple indifferent high and white, called Takman, that is a very good marcke to know the haven of Dartmouth by it.

The steart lieth from Dartmouth Southwest distant three leagues. Under the point of the Steart at the east side is a good roade for westerly Windes, betwixt the little Church that standeth upon the high Land, and the point of the steart in tenne or eleven fathom, so that the point lye South-west from you.

Salkom.

A little to the eastwards of the westermost point off the Steart lieth a haven, called Salkom, when you come from the West, it sheweth it selfe open, the west side of it is ragged and the east side goeth sloping downe, close to the West point lieth a rocke, or a rane off rockes, therefore you must give it a good birth, and leave the rockes on the larboard side: Further, you may see the breacks that can doe you hurt. Being come within the point, you can take no hurt of neither of both shoares. Upon the barre or shoulde of the entry remaineth at low water with a spring-tyde, not losse then eleven foot water, and again within it is at least three fathom deep.

Plymouth Newstone.

Six leagues to the westwards off the Steart lyeth the sound of Plymouth, at the outermost East point of the sound lieth a high round rock, called Mewestone, the west point is called Ramehead, betwixt them both goeth in the South Plymouth North northeast in, it is broad and deepe. A little to the northwards of Ramehead is a faire sand-bay, where men may anckor close under the land, in nine and tenne fathom. Three leagues South a little easterly from Ramehead, lieth a

Eddystone

Rock above water, called Eddy-stone. The point of Plymouth lieth from the Eddy-stone north and by east, and north-northeast, distant about foure leagues. In the sound by the Land off Plymouth, lieth a little Island, which is fast to the west side with a riffe or rane off Rocks under water, so that men must saile alongst to the eastwards of it, whether they be bound into Catwater, or into Hamoafe, the west harbrough. If you will goe into Catwater, then runne in betwixt the Island, and the point on the east side in with the land of Plymouth, untill that you see Catwater open on starboard side of you, goe then into the eastwards betwixt the point of Plymouth, and the foresaid East point on the starboard side of you, leaving the most part the channell on the starboard side of you, until you come within the point, and anckor there right aganst that high steepe norther-land, there is at low Water with an ordinary tyde foure and five fathom deepe.

Catwater.

When you saile into Catwater, you must take heed, and give a good birth to the Souther point off the entry off Catwater, for there lye off to the foresaid point, a ledge off Rocks under water, neare about two cables lengths from the Land, and upon the point of the ledge or showl, lieth a buye, where is at halfe flood about twelve foot water, which buye you must leave on your starboard side in going into Cat-water, and when

you have Cat-water altogether open, you may run into the eastwards, leaving (in the entry of the harbour) two third parts of the channell on the starboard side, as before is said, because the South shoare is somewhat flat off, there lying a sandy bancke, which reacheth to the second point of the south shoare of Cat-water.

A litle to the eastwards of that foresaid little Island, lyeth a rocke under water, upon which it is at low water not deeper then two fathom. For to saile within the Island, you may goe into the eastwards, or to the westwards of the rock according as occasion shall serve. If you wil saile into Hamoafe, to the westwards of the rock, then take the sounding of the Island in foure or five fathom at low water, and runne in so by it, untill that the Visser Village (lying to the northwards a little within the land) come in the west side of the valley on the north shoare, then are you to run through betweene the Island and the rocke, and to the westwards off the rock. Within the Island upon the land of Plymmouth, standeth a wall or hedge, when as you see that onending, and the chappell of the foresaid Visser village commeth to the north-side off the Valley, and Cat-water commeth open, then doe you runne over the rocke. Betweene the Island and the maine men may anckor in 12 and 13 fathom.

If you bee bound into Hamoafe, you must runne in betweene the Island and the land off Plymmouth, and then in amidst the channell betweene the two Lands, untill that the entry off Hamoafe be open, runne then into the northwards, as the channell leadeth, untill you come in about the west point, and anckor there in sixteen, fifteen, and twelve, or ten fathom. In the narrow it is fiteene, sixteene, seventeene, and also twenty fathom deepe, and betweene the Island and the maine, eight, nine, tenne, and twelve fathom.

About halfe a cables length to the eastwards off the Passage way going into Hamoafe, lieth a suncken rock under water, called the German, about two great shippes length from the shoare and at low water hath not above foure foot water upon it. And when men doe come any thing neare this foresaid suncken rock going into Hamoafe, either with the flood or the ebbe, the tide wil fet them right upon it, if it bee calme. Therefore to avoyd it, men must (with calme weather) give this foresaid suncken rock a good birth, untill they bring the houses of the Fishers-village, called the Stone-house, open of the easter point of the Passage way, and then runne in over towards the north shoare, untill they have hidden the Island in the foresaid easter point of the passage way, for to avoyd a suncken Rock that lyeth off to the eastwards from the north point off the Beach of the West-side off the passage way, a halfe cables length of, and then runne amidst the channell into Hamoafe. Upon this foresaid suncken Rock at low water, is not above 3 or 4 foot water.

The German men a sunken rock.

Sunken rocks.

In the sound of Plymmouth, not farre to the northwards of the Mewestone, lye two or three suncken rockes, upon which remaine at low water not more then three or foure fathom water, the marckes of them are these: To the eastwards off Plymmouth standeth a Tower with a Mill, and to the westwards off the foresaid little Island standeth a Gentlemans house, when the little tower or turret off that house commerh over the point on the west side of the Island, and the foresaid tower and mill to the eastwards of Plymmouth come one over the other, then are you upon the innermost suncken rocke or showl, which at low water foure fathom deepe. But when the point off Hamoafe commeth even without the point to the westwares off the Island, and the foresaid Tower and mill also one in the other; Then are you upon the outermost rocke, where it is at low Water and spring-tyde three fathom and a halfe deepe.

Sunken rocks.

From Ramehead westsouthwest five leagues, lyeth Foy, and betwixt them on the coast lyeth a little Island, a litle to the eastwards of a point, called Talland-point, thwart of West-Louwe, called Louw-Island, you may anckor there to the eastwards of the Island in 5 or 6 fathom.

Lowland.

Foy is a broad haven, where a ship may go in at halfe flood, at the east side off the haven standeth a little Church with a little steeple, and on the west side a white Church, somewhat greater then that upon the east land, with a square steeple at the west end of it.

For to saile into Foy, you must have at least a halfe flood, and runne in midst the channell betwixt the two points, and being come within, then chuse which side you will, but the most water is by the west land, betweene the stakes and the Tower that standeth upon the west land. Being come within the Stakes (as you come in by the West-land) then beare somewhat off presently from the west shoare, almost into the

Foy.

middle of the channell, nearest to the west shoare, untill you come before the Village that lieth on the West side, there is a deepe docke, where a shippe that draweth sixteene foot water may lye a float at low water. In the sayd dock may 3 or 4 shippes lye.

If (when you come in by the east land) you desire to bee in the foresaid docke or poole, then sayle in untill you come within the stakes, and then edge over off from the east-land untill you come nearest the west land; for to avoyd a Flat, which lieth by the east shoare alongst the haven, and beginneth against the first house of the West-Village. If it should happen, that you could not lead it in with a sayle, then let your anchor fall without the stakes, and warp in with hawfers, untill you come into the foresaid poole.

You may also sayle so farre in, that you may see a wall on the west side of the haven, where lieth a village behinde it. A shippes length to the southwards of that wall, it is good lying by the east land, being morred by foure cables, there may also a ship ride a float that draweth sixteene foot water. You may also sayle further in alongst by that Swach that lieth on the west side, wherein the mill standeth, but come not to neare the north point of the Swach, for there by it lieth a rock under water, being past that you may morre your ship in the middest of the channell, there is best lying for shippes that draw much water.

Dodman. Foure leagues southwest from Foy, lieth the point of Dodman, and two leagues to the Westwards of it lieth the haven of Falmouth. The point of the Dodman is double land with a round hill, which to the Westwards goeth sloping downe somewhat towards the West end standeth a mill with a sharp tower, and some litle houses upon the land, somewhat to the westwards, men may see the castle of Falmouth upon a round hommocke against the high land. This land is very good to know when you come from the West, or from the Lizart.

Upon the West point of the haven of Falmouth standeth a Castle upon the high land and in the entry nearest the Westside, lieth a great rock above Water, you may sayle about it or both sides, at the inner side of the east point lye also some rocks of from the shoare. For to saile in there to the eastwards, alongst by the foresaid rocke, you must runne in within two cables lengths, alongst by the eastland leaving the foresaid rocks on the starboard side, and the great rocke on the larboard side, and so saile right in with the high land that lieth on the West side within the haven. Within the haven standeth on the Land a white Chalkye spot, also a litle wood off trees, keepe them over the North point of the foresaid high West-land, and saile so right in with them, keeping them so untill you come neare them, you shall finde so at halfe flood, that betwixt the foresaid Castle upon the west point, and the easter Castle that standeth on the east side, within the haven, over against it, or a litle within the Castles. When you shall then come by that foresaid high West-land, runne alongst by it, unto the north-end of the same, and anchor there in twelve, thirteene, or fourteene fathom. You may also from thence edge over towards the east land, and anchor there under or behinde the banck, that lieth of from the easter Castle alongst the middle of the haven, in 6, 7, or 8 fathom: the banck falleth almost dry at low water, and is soft ground, so that the shippes sit in the oafe, when they come there a ground.

For to saile into the westwards of the foresaid great rock, you must take the sounding of the west land, where the Castle standeth upon, in five or six fathom, being somewhat within the rock, runne (as before is sayd) towards the West-land. To the westwards of the rock it is in that channel six and seven fathom deepe at halfe flood, but in the channell to the eastwards of the rock, seven and eight fathom.

Helford. Foure leagues south and by west from Falmouth lieth the east point of the Lizart, betwixt them both lieth a haven, called Helford, which is litle used of shippes. At the south side of the haven, lieth a steepe point, and on the north side a low sharp point. Within the haven on the south-side, standeth a Gentlemans house beneath at the strand, and upon the hill standeth a tuffe of trees, you must keepe these one in the other, and runne in so a middest the channell into the entry of the haven. On the northside stand also two or three trees, these come a masts length to the westwards of a litle house that standeth in a white sandy bay, thereupon you may saile in also a midst the channell; it is a short in-let, being come within, you may anchor in six or seven fathom. Upon the south side standeth also a sharpe Tower, and upon the north side a litle Castle upon the steepe land.

The Lizart hath trees points, the northermost is called the

Blacke-head, from that too the second the coaste lieth south-west and by west, & alongst to the third about westsouthwest, or west and by south: from the second or middlemost point; lye to seawards some rocks a cables length, or a cables length and a halfe of, called the Striggs.

To the northwards of the northermost, or eastermost point of the Lizart, betwixt Helford and the foresaid point lye some rockes a great league of from the land, called the Mannackles; south and by east from the Harbrough of Falmouth, and east-northeast from the foresaid Blacke-head, where off many off them are above water at low water, and some of them at high water remaine uncovered. Betwixt them and the shoare it is very foule and rocky, so that men cannot runne through betwixt them without great danger.

He that cometh out of Falmouth, and is bound to the westwards, must not goe more southerly with an ebbe the south-southeast, or southeast and by south according as the winde shall be, for to runne cleare of these foresayd.

Of the tydes and Courses of the streams.

In the channell of Winchelsey a south and by east moone.
At Beachy by the shoare a S. S. E. and N. N. W. moone.
In the fareway thwart of it, a south and north moone.
From Beachy to the Nessle e. n. e. and west southwest.
At beachy by the shoare before the seven Cleeves, the flood falleth east by south, and de ebbe west and by north.
From Wight to beachy N. and by N. and w. and by south, thwart of Wight, before Dunnose, a south and by east moone maketh full sea.
At S. Ellens and the Cowes a f. f. e. moone.
At Hampton at the kay, a S. and N. moone.
Within the Needles of Wight a southeast and by south moone.
Before the haven of Poole a southwest and northwest moon maketh high water: also a south and by west moone.
Thwart of Portland in the channell a S. S. E. and n. n. west moone.
From portland to Wight, the flood falleth east and by north and the ebbe west and by south.
In Dartmouth and Torbay a west and by south moon maketh full sea.
Thwart of the Steart in the channel, a w. n. w. & e. f. e. moone.
From the Steart to Portland in the middle of the channell, the flood falleth east-northeast, and the ebbe west-southwest.
Thwart of Dartmouth by the land, the flood falleth n. e. and by north, and the ebbe south-west and by south.
Thwart of Torbay towards Exmouth in the baye, the flood falleth north-northeast, and the ebbe south-southwest.
In Plymouth and Foy a west and by south, and east and by north moon maketh the highest water.
Thwart of Foy in the channell an east-southeast moone.
A sea-board of Falmouth an east and by south, but in the haven of Falmouth an east and by north moone.
At Helford and at the Lizart, by the land, an east-southeast and west-north-west moone maketh the highest water.
From the Rame head to the Steart by the land, within the Eddy-stone, the flood falleth east-southeast, and the ebbe west-northwest.
From the Dodman to Rame head, the flood falleth east-northeast, and the ebbe west-southwest.
From the Lizart to the Dodman, northeast and south-west.
In the channell betwixt the Lizart and the Steart, thwart of Foy, the flood falleth east and by north, and the ebbe west and by south.

Of the Depths.

Betwixt Winchelsey and Piccardy in the middle of the channel it is deepe 26 and 27 fathom, upon such depth men may see Fayerley and the land off Dover.

Without Beachy thwart of the seven Cleeves it is deepe 28 and 30 fathom. In the offing thwart of Wight it is deepe 38 fathom, in such depth men may see the land.

In the channell betwixt Portland and the Caskets it is 40 fathom deepe, when it is cleare weather, men may see the land on both sides: the nearer England the showlder towards the Caskets it is deepest.

The Steart and the land of Dartmouth men may see them both in five and forty fathom.

When you have the high land of Plymouth north from you, you may see it in fifty fathom, it is high double land, and sheweth it selfe first in two hills. That same high double land within the land, you may see it from thwart of Foy untill you come thwart of Dartmouth.

The Dodman you may see in 42 fathom of from the Lizart to the Steart.

The Lizart you may see in five and fifty fathom, there the ground is white and red shelly sand.

Courses and distances.

From Fairlee to beachy west southwest	5 leagues
From beachy to the Owers w. and by S.	13 leagues
From thwart of the Owers in 12 fathom unto Dunnose the fourth point off Wight west southwest	5 leagues
From beachy to blacknesse east	20 leagues
From beachy to Struyfaert south	24 leagues
From beachy to the Caskets S. w. and by west	27 leagues
From Dunnose to the southernmost point of wight, unto the Needles of wight, west and by north and west-northwest	4 leagues
From the west end, or the Needles of wight, to the point of S. Albons land west	4 leagues
From the Needles of YVight to portland west and by south and west-southwest	11 leagues
From Wight to Deep east-southeast	37 leagues
From the east end of wight to Struyfaert S. E. somewhat southerly	29 leagues
From VVight to the Caskets, south-west and by south	20 leagues
From portland to Seynhead south-east and by east	37 or 38 leagues
From portland to the Caskets south and by east	23 leagues
From portland to S. Paul de Lion south-west and by south	40 leagues
From portland to Ushant south-west	35 leagues
From portland to Exmouth west-northwest	13 leagues
From Torbay to Dartmouth south-west	2 leagues
From Dartmouth to the Steart south-west	3 leagues
From portland to Torbay west, somewhat southerly	13 or 15 leagues

From

The Coast off England and from Fierley to Lizart.

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From portland to Dartmouth w. ft and by S. ————	16 leagues	From the lizart to Garnsey e. and by S. ————	37 leagues
From portland to the steart west south west westerly ————	18 leagues	From the lizart to the Sept Isles, or seven Ilands, the coursis S. E. and by E. ————	27 leagues
From the steart to the Caskers east south east ————	19 leagues	From the lizart to Ushant S. ————	29 leagues
From the steart to the Sept Isles, south and by east easterly ————	24 leagues	From the lizart to G. de Finisterre S. S. w. ————	153 leagues
From the steart to S. Paul de Lion south and by west ————	29 leagues	And that course goeth about 5 leagues without the cape. ————	
From the steart to Ushant south west and by west ————	40 leagues	From the lizart to Teneriffe f. f. w. ————	466 leagues
From the steart to Ramehead, the course is west north west ————	8 leagues	From the lizart to Tercera S. w. and by w. ————	386 leagues
From Ramehead to the Iland off lowe w. f. w. ————	5 leagues		
From the Ile of low to Foy, west ————	2 leagues		
From Foy to the Dodman S. w. ————	4 leagues		
From the Dodman to Falmouth w. and by S. and w. f. w. ————	4 leagues		
From Falmouth to the Lizart S. and by w. ————	4 leagues		
From the steart to the Eddy stone w. or a litle more northerly ————	7 or 8 leagues		
From the Eddy stone to the Ramehead n. a litle westerly ————	3 leagues		
From the Ramehead to the Dodman west south west ————	8 leagues		
From the Dodman to the Lizart S. w. ————	7 leagues		
From the steart to the Lizart w. and by south ————	20 or 21 leagues		

Heights.

Dunnose to the southernmost point of Wight lieth in ————	50 degrees 36 minutes
Portland lyeth in ————	50 degrees 30 minutes
The steart lyeth in ————	50 degrees 12 minutes
or as some will hold, more northerly ————	
Torbay lyeth in ————	50 degrees 25 minutes
The lizart lyeth in ————	50 degrees

How these Lands doe shew themselves at Sea.



Beachy sheweth thus when you come from the west.



Thus sheweth Beachy with the seven Cleeves, when you come from the w. and sayle along by it.



Thus sheweth the Iland Wight, when you sayle along by it, being 3 or 4 leagues a seaboard the land.

Portland.



Thus sheweth S. Albons land, with portland, to the westwards of it, when you sayle along by it, being to the eastwards of portland.



Thus sheweth portland when you come from the westwards.



Thus sheweth portland, when it is north and by west from you fixe leagues of



Thus sheweth portland, when you come from the eastwards.



Thus sheweth the land to the westwards of portland, when you sayle along by it.



The land betwixt Torbay and the Steart sheweth thus.



Thus sheweth the high land to the eastwards of Plymouth.

The Steart

Darmouth

Torbay



Thus sheweth the land betwixt torbay and the steart, when the steart is S. w. and by w. from you.

The Steart

Darmouth

Torbay



Thus sheweth the land torbay and the steart, when the steart is w. S. w. from you.

Torbay

Torbay

Torbay

Torbay



The point of torbay sheweth thus in divers forms, according as you are southerly or northerly of from it.

The Steart

Darmouth



These two figures belong one to the other at the two crosses.

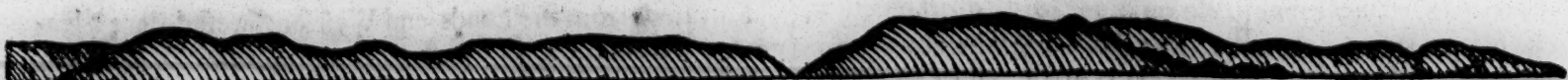
Torbay

Apfium.



Thus sheweth Dartmouth, as it is portrayed in these two figures, when you are right thwart from it a league or two from the land, with the land on both sides of it, as well towards torbay, and to the northwards of it.

The Steart



Thus sheweth the Steart, being north from you 2 or 3 leagues.



The Steart being north from you 7 leagues, sheweth thus.

This open will be shut to when you sayle to the westwards.

This open will be shut to when you sayle to the westwards.

Steart.



When the steart is northeast from you, it appeareth in this forme, and then the point goeth flat downe.

Thus

Salckom.

The Steart.

Plymouth northnorthwest

Thus sheweth the land to the westwards of the eastermost point of the Steart, towards Salckom, when you sayle alongit by it.
The Steart northnortheast.

Mewstone

Thus sheweth the land of the Steart, and alongit to the westwards of Plymouth, when the Steart is northnortheast about 2 leagues, and the sound of Plymouth northnorthwest 5 or 6 leagues from you.

The Steart.

The land betwixt the Steart and the sound of Plymouth sheweth it selfe in this forme, when you sayle alongit by it.
Maker Church.

The Dodman

Thus sheweth the land of Ramehead, and to the northwards of it, when you sayle into the sound of Plymouth.

Ramehead.

When you are thwart of the Dodman 4 leagues without the land, that and the land to the eastwards of it, unto the Ramehead, sheweth it selfe in this manner.

The Dodman when you are right before it.

Thus sheweth the land to the eastwards of Falmouth, when you sayle alongit by it a league a seaboard the land.
Lizart Falmouth Dodman

Lizart

Thus sheweth the land betwixt the Dodman and the Lizart.

Helford

Thus sheweth the Lizart when you sayle alongit by it.
Falmouth.

The land betwixt Falmouth and the Lizart sheweth thus when you are before Falmouth.

The third demonstration,

Where in are delineated the coasted off England, from the Lizart, and Englands end, to the C. off Cornwall, the Sorlings, and the channell off Bristol.

The Lizart



THE Lizart is a low point, where some rocks lye from it, upon the S. end standeth a Tower, and upon the high land towards the N. end standeth another tower which is sharpe.

Mounts-bay.

S. Michaels Mount.

About five leagues northwest from the Lizart, lyeth a great Baye, called Mounts-bay, at the west point of that Bay lieth a little Iland, whereupon stand two little shore towers like beacons, at the east side in the bay lieth another high little Iland, whereupon standeth a Castle, called S. Michaels Mount. At the east side off this Baye, lieth a great rane of rocks, which lye off into sea a league from the land, whereof men must take good heed in dark wheather; from theuce to the southward towards the Lizart, the coast is all alongit full rocks, but these lye not so farre off from the shore.

For to saile into Mounts-bay, comming from the Lands-end, or from the Lizart, and being to the Westwards off the foresayd rane off Rocks, you must runne in right with the little Iland called S. Michaels Mount, so long untill you come within a halfe league off it, then edge up to the Westwards towards the Bay, untill that you see that foresayd little Iland, with the two little short towards at the West point, leave it on the larboard side, and runne in close alongit to the northwards off it, for it is very cleane, but leave the Castle a great wayes on the starboard side, being foule about. Being come within the little Iland at the West point, you shall see within it a great sandy baye, anckor there in seven or eight fathom. Eastsoutheast and southeast winds doe blow there right open in, for all other winds you lye there landlockt.

Lands end of England

Four leagues to the Westwards of Mounts baye lyeth the Lands end off England, and lieth from the Lizart Westnorthwest distant nine or ten leagues. About a leagues S. E. from the Lands-end and a halfe league without the land lyeth a suncken rock, which at low water commeth even above water.

Thwart of that rock standeth a Church upon the land, when you can but even see that over the high land, then are you thwart of the foresaid rock, to wit, even as farre from the land as the rock; but when the Church is hidden behinde the high land, that you cannot see it, then are you nearer to the land then the rock, or within the rock towards the land, and so you shall goe through betwixt it and the land.

Upon the Lands end off England lye two round hillis, when you get sight off them you shall see upon the highest a spire tower, comming somewhat nearer, you shall see upon the outermost end, in the low land, another spire tower, thereby is the Lands end reasonable well to be knowne. The ground is thereabouts whitish sand, with red sand, and mingled with shells.

From the Lands end unto the C. off Cornewall, or to the little Iland Bresam, lieth the coast most N. about 5 leagues.

At the Lands end lye some Rocks, you may runne in within them as well to the northwards as to the southwards, and come to anckor in eight or nine fathom: to come in there from the southwards it is narrowest, and tenne fathom deepe: from the northwards it is best and broadest, and eight and nine fathom deepe; buth on the left side close to the north point off the Lands end lieth a suncken rock, which you must avoyd when you saile in there.

Silly lieth from the Lands-end Westsouthwest distant 8 leagues, but from the Lizart west 16 or 17 leagues.

Betweene the Lands-end and Silly lye the Seven-stones W. S. W. and W. and by south foure leagues from the Lands-end, and northeast and by east, and eastnortheast, almost 3 leagues from Silly, that is, a rane off rocks which come not above water, but allwayes breaketh upon them.

Southsouthwest and southwest and south, 3 or 4 leagues from the Lands-end, and 5 leagues east from Silly, lieth also a sharpe rock, called the Gulfe, which commeth at halfe tyde above water, and is round about indifferent cleane.

Silly is divided into divers Ilands, alongit the West side lyeth

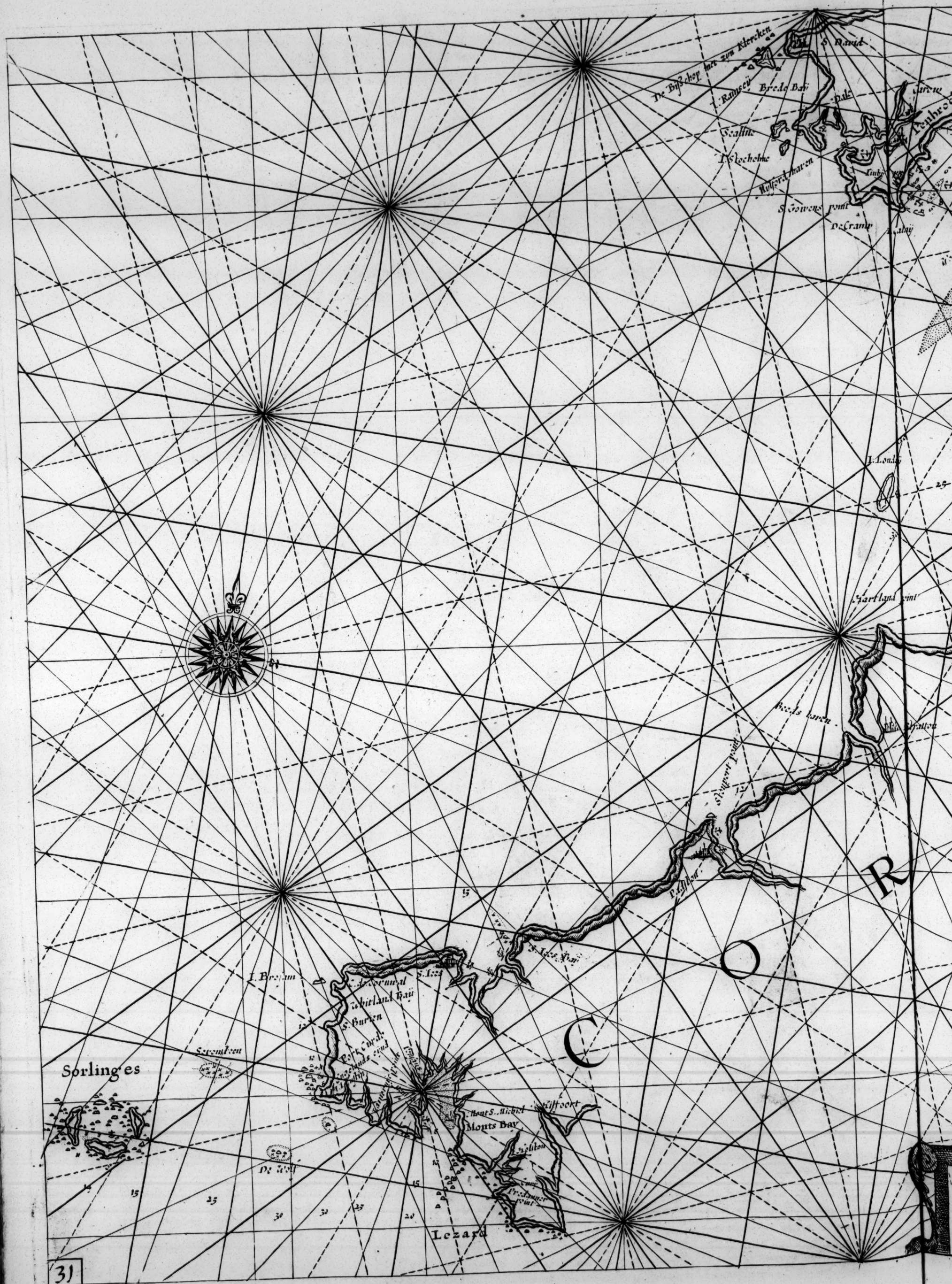
Sevenstones.

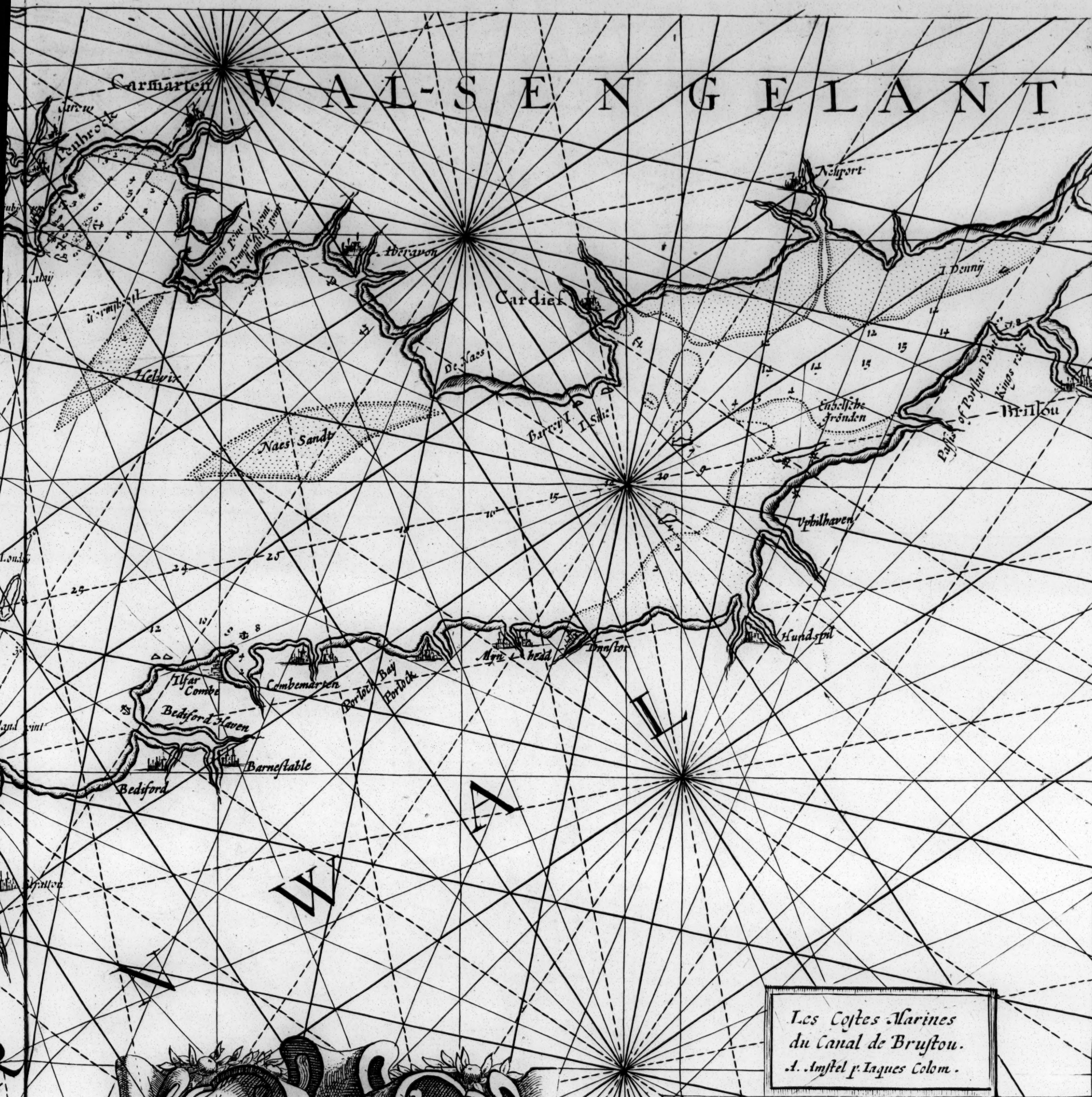
The Gulfe

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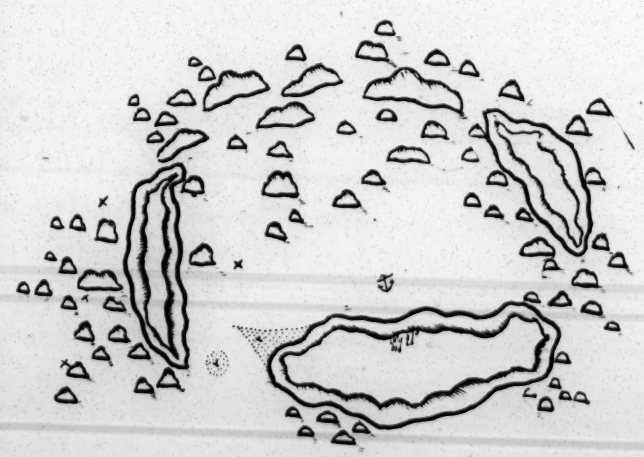
ie Gulfe





De Custe van Engelandt.
 van Lezard. tot Engelandts
 eynde. de Sorlinges en
 de Canaal van Bristou
 Nieuwlycx beschreven by
 Jacob Aertsz. Colom.

Les Costes Marines
 du Canal de Brustou.
 A. Amstel p. Jaques Colom.



Sorlinges

1	2	3	4	5	6	7	8	9	10	11	12
Duytsche mijlen 12 voor een graadt						Lieuues d'Allemagne 12 en un degre					
1	2	3	4	5	6	7	8	9	10	11	12
Spaansehe mijlen 12 voor een graadt						Lieuues d'Espagne 12 en un degre					
1	2	3	4	5	6	7	8	9	10	11	12
Engel. en Fra. mijlen 20 voor een graadt						Lieuues Angl. et Franc. 20 en un deg.					

For to
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lieth a great multitude of rocks, men may goe in there through divers channels or sounds, but the souther channell is the best. About the middest of the entry of that sound or channell, lieth a suncken rock, men may goe in on both sides off it, but to the eastwards off it is broadest and best. For to faile in there comming from the east, you may runne alongst by the east land in eight or nine fathom, and you shall so runne alongst to the eastwards of that foresaid suncken rock, which lieth against a sconce a little without the castle. The markes to avoid this Rock, are two rocks which lie on the west side within the haven, the one (to wit the innermost) is somewhat greater then the other. If you bring them one in the other, or the northermost a little to the eastwards of the southermost or the smallest, so that you may even see through between them, and sayl so right in, keeping them so, you shall so faile farre enough to the eastwards of the rock. If you come from the southwards or the westwards, and are bound into Silly, then runne towards the east-land so long untill you bring the two foresaid rocks within the haven, one in the other, or even through one another, faile then so in, and then you shall runne (as before is said) cleare of the foresaid suncken rock, thwart of the sconce. At the inner point of the Iland, at the east side of this souther channell, lieth another suncken rock, where of men must take heed. For to avoid it, you must run so long to the northwards, upon the markes of the foresaid two rocks, untill you may see the litle Tower in the sandy Bay; then goe to the eastwards, unto the Bay, and anckor there in eight or nine fathom. When you come neare Silly upon the south side, you shall see a square Tower in the sandy bay or valley, and to the westwards many litle Ilands and rocks. The ground of Silly is somewhat stony with some red shels.

Of the depths and many sorts of grounds before and in the channel betweene Silly and Vshant, and thereabouts.

Southwest and by south from the Seaws seven leagues it is deep 72 fathom, the ground pale, white course sand, like small fretted litle stones, with litle peeces of queenes shels with gray flat litle stones, & white glittering needles, faile from thence n. & n. and by e. and then you shall fall well to passe with Vshant.

About two leagues southwest from the Seams it is deep 72 fathom, the ground there is white, yellow rough, & somewhat longish sand, with a litle red smal shelly sand, with many gray crompted things, and some small with glittering points of needles. If men did finde there 70, or 80 fathom, they Would judge it to be good channel ground.

West southwest from the Seames, so farre from the land, as men may but even see the Sheets from the poop, with cleare sight, it is 54 fathom deep; the ground is red, yellow, white and black peeces, like parings of cheefe, and a litle course red sand mingled with all.

West and by south 8 or 9 leagues from the Seames is 65 fathom, the ground it white yellow, with a litle red smal shelly sand, with some peeces of shels and queenes, not very great, with much white & yellow some thing long sand, & smal white things like poynts of needles, like as men find in the channell.

Seven leagues southwest from Vshant, or thereabouts, that men may even see it from the poop, having cleare sight in 70 fathom, there the ground is white and yellow course sand with some peeces of queenes shelles, and some peeces of white thin shels, with some gray flat ragged stones.

Southwest and by west from Vshant, about 19 or 20 leagues in 78, or 80 fathom, the grounds is white and yellow course sand, with small glittering needles, with white peeces off queenes shels, and gray and yellow flat stones, and litle peeces like as it wers of Oyfter shels.

West and by south from Vshant 21 leagues, in 68 fathom, the ground is red, yellow, and black, mingled with a litle White round smal sand, like shelly sand. But in 80 fathom, 21 leagues west and by south off from Vshant, the ground is yellow and shelly, with some gray and crompted litle needles like ends of smal rie.

In eighty fathom 24 leagues from Vshant west and by south, men finde rough great sand, with many sorts of shels, red, White, yellow, and gray, with peeces of queene shels.

From Vshant west 16 or 17 leagues, in 75 fathom, the ground is white and yellow course sand, with peeces of thinne White shelles, & gray peeces of queenes shelles, like as it were of Oyfter shels, white smal white glittering things like needles.

Eight or nine leagues from Vshant it is deepe 70 fathom, the ground red, white, yellow and gray shelly sand; with red, yellow, and black peeces off shelles, & smal red, yellow, black, and gray stones, with some smal white things like needles.

Eight and forty leagues west and by north from Vshant and

50 fathom west southwest from the Lizart or thereabouts, it is deepe 95 fathom, the ground red, yellow, and black sand, with smal white round shelly sand, and some litle peeces of shelles and queen shels, with some peeces of thin shels.

Three and thirty leagues west & by north from Vshant and 27 leagues southwest and by south from Silly, in 95 fathom, the ground is gray, red and yellow, mingled with smal blauck sands, with darke, red, white, and yellow peeces off shels, to wit, gray and red shelly sand. An eastnortheast course from this ground off, is the best, it is in the height of about 49 degrees.

Four and twenty leagues west, or west and by north from Vshant, and south and by west from Silly 21 leagues in 80 fathom, there the ground is white, gray, red and yellow fine smal shelly sand, with litle red and white peeces of litle shels, to see to like bruised mustard seed in the height of 49 degrees.

Seven or eight leagues west and west and by north from Vshant in 68, or 70 fathom, there the ground is white and yellow, smal shelly sand, mingled with many gray crompted litle things, like needles.

About 30 leagues somewhat more northerly from Vshant, in 90 fathom, the ground is smal white rough, and somewhat long sand, mingled with an red and yellow, and some glittering litle things like needles, with two or three peeces of white gray shels. If you goe on from thence northeast and by north, untill you come in 55 fathom, there the ground is yellowish, white course shelly sand, with white peeces off shels, then you may see Silly lye nine or tenne leagues north or somewhat more westerly from you.

West northwest from Vshant 21 leagues, and southwest and by south from the Lizart 27 leagues, in 80 fathom, the ground is gray and red shelly sand, there commeth also on the lead a litle peece or two of white or gray queene shels, with yellow and red peeces of shellow, also peeces off perriwinckles.

Nine leagues northwest and by north from Vshant, the ground is white and yellow rough shelly sand, with gray crompted glittering litle things like needles, there come also on the lead litle things like smal straws. If you goe on northeast from thence, you shall fall vwith the Steart.

Twenty leagues northwest and by north from Vshant, and 16 leagues southwest somewhat southerly from the Lizart in 68 fathom, the ground is white yellow and red smal round sand, vwith some white glittering litle things like needles, with one or two litle gray crompted things like needles, and 2 or 3 litle peeces of litle vvithe shels.

Nineteen leagues N. N. W. from Vshant, & 12 or 13 leag. S. S. W. from the Lizart, it is 68 fathom deepe, the ground is there al manner of ragged stones, gray, red and black vwith red peeces of shels, & som gray crompted litle things like needles.

Nineteene leagues north and by west from Vshant, the S. from the Lizart, it is deepe sixty two fathom, the ground is vvithe and course shelly sand, vwith vwhite and gray crompted litle things, like needles, vwith vwhite peeces of shels, and 2 or 3 litle stones amongst.

Twelve or thirteene leagues vvest from Silly, or somevwhat more northerly, it is deep sixty fathom, the ground is gray & oasie, mingled vwith smal black sand. In some place of the same depth it is vwhite gray, oasie smal sand, vwith peeces off thin White shels amongst, vwith a litle peece or two like parings of cheefe: this ground cannot be gotten up vwith candle tallow, or other hard tallovv upon the lead, but vwith soft tallow, or butter. In these depths you have no where such oasie ground as there, whereby men may well know that they are on the back side of Silly or England, to wit, west from Silly.

West from Silly 7 leagues, it is oasie gray sand with 2 or 3 Silly. litle peeces like parings of cheefe.

Seven or eight leagues south southwest from the Lizart, in sixty fathom, the ground is white grosse with a litle red sand, with litle shels, & litle glittering white things like needles.

Nine or ten leagues fouth and by west from the Lizart, in 60 fathom, the ground is yellow pieces of shels, and gray pieces of soft flat stones like parings of cheefe, with some red pieces of shels, without any sand therein.

Southwest and by west from the Lizart, and S. S. W. from Silly 19 leagues it is deep 78 fathom, the ground gray, yellow, and red shelly sand, with red, yellow, and blue pieces of shels with queene shels, and a piece or two like parings of cheefe, or like of pieces Oyfter shels, with also two or three glittering litle things like needles, in the height of about 49 minutes degrees, and 30. minutes.

Fifteen or 16 leagues S. W. and by south from the Steart, in 57 or 58 fathom, the ground is pieces of all maner of shels, and queen shels, with a litle yellow and white shelly sand, with many sorts of litle stones, and gray litle pieces like pa-

rings of cheefe, with some crumpeld, and some not crumpeld, but litle glistering things like needles, and little things like maggots that are in Bakon.

Stear. Southsouthwest from the Steart, 16 leagues, in 53 fathom, the ground is white reddish shelly sand, with pieces of queene shels, with red gray little stones.

Southwest from the Steart 8 leagues, it is deep 40 fathom the ground gray and red shelly sand.

Southsouthwest from the Steart, 13, or 14 leagues, it is deep 47 fathom, the ground pale muddy sand, with little long things, and little stones.

A great kenning S. S. E. from the Steart, it is deep 40 fathom, the ground red sandy clay with pits in the tallow.

Stear. Southwest eleven or thirteen leagues from the Steart, in fifty fathom, the ground is white and yellow small shelly sand, with some pieces of white shels, with gray and crumpled, and also glistering litle things like needles. In fine, he that soundeth much, getteth many and divers sorts of grounds and sometimes great change in little change of distance of place. But he that soundeth and findeth white shels, with little things like straws and needles, it is certaine that he is nearest to Vshant: but if he finde brandy ground, or blacke little stones mingled with white little things, then is he nearest to Silley.

Markes of Vshant & Silly. Hee that soundeth thwart of Vshant, and findeth small white sand, and little shels, and small litle things oasie and white. Ushant shall then lye N. E. from him. If he finde long small litle things like needles, then shall Ushant lye S. E. from him. But if he be not fure of these grounds, then he shall beare to the northwards. And if he finde deeper water then he is towards the Seams, but if hee finde it showldy, then he is in the entring of the Channell to the northwards of Ushant. If he be between Ushant and the Seams in 70 fathom, he shall finde the ground to be small litle stones like blak sand of the earth: or else if he finde the ground to be great red sand, then he must stand to the northwards, untill that he finde the white sandy ground, and long small things then he may hold himself certaine to be in the entring of the channell.

From the Lands-end of England to the C. of Cornwall, the coast lieth north about 5 leagues, but Silly and the foresaid Cape lie southwest and northeast distant about 9 leagues. By the I. bresam Cape lieth a little Iland or Rock, caled Bresam, betwixt it and the Cape men may saile through.

S. Yves From the Cape of Cornwal unto the litle Towne Saint Yves, lieth the coast about east and by north, and E. N. E. five or sixe leagues. Saint Yves lieth upon the west point of a great Bay, which is about two leagues broad. At the east point of the Bay lieth a little Iland, there lieth off from it a great ledge of rocks, a great halfe league thwart off into sea, whereof many of them come at halfe ebbe above water, therefore he that commeth off from the Cape of Cornwal, & wil saile alongst the coast towards Stoupert or Padstow, must keepe off (thwart of this ledge) at least a great league from the shoare, because of the foresaid rockes. Betwixt that foresaid litle Iland at the east point of the Bay and the maine land, it is also at many places rocky and foule, so that one that is not there very well acquainted, may no to saile through there without great danger. In the Bay of S. Yves is on both sides good sandy ground, where men may ankor all over, and come so neare the shoares as they will. At the West side of the Bay at the Towne, is a head where smal shippes and Barkes doe goe in within it, and lie there succoured for northerly windes, but great ships may not doe so, they must ankor without in six or seven fathom.

Stoupert Padstow. From S. Yves to Hartland point, the course is northeast 17, or 18, leagues, betwixt them both about halfe wayes lieth the point of Stoupert, to the eastwards of it lieth Padstow in a Bay, where is a very good road in 7, or 8, fathom. At the west side of that point lieth a suncken Rock under water, and upon the point a great high rock, to the westwards of that point towards S. Yves, are many white sandy and chalky bayes alongst the shoare, thereby the coast there is very good to be knowne.

Hartland point. Hartland point is a point that lieth out, 4 leagues north from it lieth the Iland Londey, which is somewhat a long Iland, it lieth most north and by W. and S. and by E. At the east side of that Iland men may ride for westerly windes in 14 and 15 fathom; but on the west side the ground is foule.

Biddeford Foure leagues to the eastwards of Hartland point east-southeast from the south end of Londey, lieth the sound of Biddeford, being a broad haven, where many shippes doe saile in and out. A litle within the mouth of the haven, it divideth it selfe into two rivers, upon the westernmost on the starboard side lieth Biddeford, and upon the easter-

most on the larboard side lieth a town called Barnestable. **barnstable**

From the point to the northwards of Biddeford Haven, unto Ilfercombe the course is E. N. E. foure leagues, that is a haven where remaineth at low water 3 or 4 fathom depth. Before the haven is also good road, in 8 or 9 fathom at halfe flood.

Eleven or 12 leagues to the eastwards of Ilfercombe, lie **Ilfercomb** two litle Ilands, about two leagues north and south one from the other, called the Holmes, the northermost is called the Flatholme, and the southermost the Steepholme, betwixt Ilfer- **Flatholme** comb and the Holmes somewhat nearer the Holmes then Ilfer- **Steepholme** comb, lieth a litle towne called Mynehead, where many ships do lade.

In the fareway betwixt Ilfercomb and the Holmes, on the English side; on the one side, and the bankes on the Welsh side on the other side, in the midst of the channel it is deepe 30, 25, 20, 18, 16, and 15 fathom, the nearer the Holmes the showldier water. When men come from the westwards within the Iland Londey, then they may see the Land on both sides, to wit, of England and Wales. The English coast even from the C. of Cornwall to the Holmes is altogether cleane, but the coast of Wales is most all foule and showldy, from the Iland Galdy unto Bristow, with many bankes, sands, and riffes that lie off. The Holmes and the Iland Londey lie west southwest, and east northeast, distant 19 leagues.

He that wil saile from Londey to Bristow, must run alongst by the English coast, untill that he come within the point of the Naes, for to avoid Naes-sand, and then forth alongst through betweene the Holmes, leaving the Steep-holme on starboard, and Flatholme on the larboard side. Men may also with litle ships, of litle draughts, saile about to the S. wards of the Steepholme, but it is there to shouldy, that there remaineth at low water no more then 2 fathom water. Under **Road under Steepholme.** Steepholme men may ankor where they wil, in 4 or 5 fathom.

He that commeth off from the Naes, and is bound to Bristow, must stand over to the Seepholme, and run alongst to the n. wards of it. It lieth from the Naes e. s. e. about 7 leagues.

For to saile through between the Holmes, the right and best **For to sail through between the Holmes** fareway, you must saile nearest the side of the Flatholme, there it is deepest, with an open wind men may alongst so neare by it without any hurt, that they may cast with a stone upon it. Within, or to the eastwards of the Holmes, lieth shoting off from the eastland, a great showld, lying off with a great taile towards the west, which (comming from the west) men might easily saile within. For to avoid it, you must fet the Flatholme (when you are passed it) southwest from you, and keepe it standing, so untill that you shall have sailed about a great league, looke out then for a little Iland, that shall then at the east shore lie neere about thwart from you, upon it standeth two mills, and above upon the maine land standeth one mill. When the mill that standeth upon the high land commeth to the west end of that foresaid Iland, you shall bee past the foresaid taile of the English grounds, and cannot saile within it, goe then eastnortheast alongst by the English grounds, which are flat, so that you may saile alongst by them upon your lead in 3 or 4 fathom so neere as you will. When then the mill that standeth upon the high land, commeth betweene the foresaid two mills which stand upon the litle Iland, then shal you be altogether past the English grounds, run then boldly towards the English coast, and so close alongst by it, as you please, towards Passis or Portshut point. From the Flatholme to Passis point in the right fareway, it is deep 14 and 15 fathom. The Welsh side you must shun, and take very good heed of it, because it is very uneven and full of steep bankes that are needle to, which at many places do fal dry at low water, you may not come neerer that coast then in 12 fathom, for (sailing towards it) you shall have at one cast ten fathom, & before you can have the lead againe, you shall sit fast, alongst from Flatholme till you come to Bristow. About Passis point men do ankor in Kings road which is between the poynt and **Kings road.** the river of Bristow, neereft the river there is good clay ground in 8, or 9, fathom. They that are bound into the river are brought in by the Pilotes. Men may from thence also saile in alongst by the coast to the River of Severne, which is also like the River of Bristow, a faire river to saile into.

For to saile from Bristow to Londey, you must goe away from Passis point westsouthwest untill that the Flatholme doe come to beare southwest from you, or els untill that the three foresaid mills upon the south land doe stand a like farre one from the other, to wit, that which standeth upon the high land, doe stand in the midst betweene the other two, saile then right with the Flatholme, and very close alongst to the southwards of it, and being passed it, goe then forth westsouthwest unto the Iland Londey.

About

Cardieff. About 3 leagues to the northwardes off Flatholm lyeth the Town Cardieff in Wales, being a tyde-haven, before it is a good road, as well for shippes that are bound to the westwardes as tho the eastwards, where men may lye landlockt almost for all windes, to the eastwardes and to the northwardes off it lie many sands and bankes, which fall drye at lowe water, and so that they make men landlockt for northeast and east winds. Hee that is bound into the roade before Cardieff comming from the west, must runne in betwixt Flatholm and the point off Cardieff, lying somewhat to the southwardes of Cardieff, and being come about the point, then to the northwardes up alongst by the shore unto the roade.

Silly. Barrey. Close up to the point of Cardieff, to wit, to the westwardes of it, lye two litle Islands, the one next to the point, is called Silye, and the westermost Barrey: betwixt Silye and Flatholme lieth a rock, southeast and southeast and by east from the point, which must bee avoyded when you wil saile through there unto the roade of Cardieff. When it is high water you may saile over all that which at half ebbe cometh not above water.

The Naes. About five leagues west from the point of Cardieff lieth the Naes, to the westwardes of it the land falleth away first about northwest, then afterwards southwest, or southwest and by west, and so maketh a great bay betwixt the Naes and Wormes head, where there are very good roads for west, north, northeast, and east winds.

Naessand. From the Naes a litle from the shore lieth a great bancke, called Naessand, which lieth of from thence west and by south, and westsouthwest at least five leagues into sea. From Wormeshead likewise lyeth of a banck which is very steep, called Helwix, about foure leagues southsouthwest, and southwest and by south into sea, they that come from the eastwardes, and will goe to ryde in the Bay betwixt the Naes and Wormeshead, runne alongst close by the point of the Naes, through betwixt the Naes and Naessand, likewise they that come from the westwardes, and are bound in there, may runthrough close alongst by the point of Wormeshead and the Helwix, it is betwixt them both about an English mile broad. He that cometh out of the sea, may come in betweene the foresaid sandes or bankes, it is there wide and broad.

Helwix. Wormeshead is a point lying farre out, to look to a farre off almost like the Oldhead in Ireland, but it is above or under, & goeth sloping downe towardes the north, it hath many white chalky spots, whereby it is very good to bee known.

Wormeshead. About foure leagues to the westwardes of Wormeshead lieth the litle Island Caldy, where upon standeth a white Tower, shewing off at sea like a white saile, which is set there for to know the land by.

Caldy. Betwixt this Island and the point off Wormeshead, the land falleth a way with a great bay to the northwardes, unto Carmarthen and Tinbuy, in this Bay it is all over good anchor ground for to ride. On every side of the Island Caldy men may also anchor, and have shelter for all windes. A litle to the northwardes of Caldy lieth a rane of suncken rockes, called the Wullox. Hee that will saile about to the eastwardes off the Island, to the Tinbuy, may runne close about by it, up to the westwardes, through betwixt the Island and the suncken rockes, leaving them on the starboard side, or else he may runne alongst also to the eastwardes and to the northwardes of the suncken rockes leaving them on the larboard side, and so then also to Tinbuy, and anchor there before the Towne in five or sixe fathom. To the eastwardes and to the northwardes off the foresaid rockes, it is also a good anchoring in fixe, seven, or eight fathom, it is there all cleane ground, and farre of shold water. Men may also saile through to the westwardes of the Island Caldy, (which is between the Island and the point of the maine land) to Tinby, but it is there narrow, yet cleane, and deepe enough.

Wullox. The River of Garmarten lieth from the Island Galdy northeast and by north distant about foure leagues, the channell for to saile in there, lieth in eastnortheast, on the east or the south side lieth a great Banck which lieth of farre from the shore, and on the off-side goeth off flat. For to saile in there men may found it in alongst by the east or north shore, untill they be over the sholdest of the barre, there is upon it at halfe flood about foureteen foot water, and being over the barre it will be againe foure fathom deepe, or thereabouts, then they may run in forth alongst by the south shore, by the lead, untill they come within the river.

River off Carmar. Foure or five leagues to the westwardes of the Island Caldy, lieth S. Gawens poynt, the south point of Wales, by some called the white point. About halfe an English mile southsouthwest from the point, lieth a suncken rock, called the Crow, whereof men must take heede.

Two leagues to the westwardes of S. Gawens point lieth the haven of Milford, a broad and wide sound, lying in at the entry N. E. in, being come in within the points, men may goe up to the northwardes, eastwardes, and southwardes, unto divers places and roades. About by the north point men may sayle unto Daleroade, there it is good lying in three fathom and three fathom and a halfe at low water. When men come a litle within the south point in the open of Milford haven, there lieth a litle Island or rock like the Mewstone by Plymmouth, being past that, a litle they may run to the southwardes, into a bay, where they may lye landlockt for all windes.

A litle to the westwardes of Milford-haven lye two litle Islands, the southermost is the smallest, called Stockholm, and the northermost Scaline. About 2 leagues N. N. W. or N. W. and by north from thence, lyeth the Island Ramsey, there betwixt them hath the land a great Bay, called the Broad-bay. Ramsey lieth at the north point, and Scaline, at the south point off the Bay, there in alongst the shore is good riding for north, northeast, east and southeast winds, in 7, 8, and 9 fathom. Upon the North point of this Bay lieth a litle Towne, called S. Davids, to the northwardes of lieth the Coast off Wales alongst northeast unto Cardigan.

About two leagues west and by south to seawards from the Island Scaline, and 3 leagues southwardes from Ramsey, lyeth that litle Island Grasholm, which is a round cleane rock, and about 4 leagues of from it lye also two litle Islands, which are fowle, called the Smalles. The lying of them, with the dangers thereof, you may reade in the description off Ireland.

On the northwest side of the Island Ramsey lyeth the Bishop's shoppe with his Clarks, these are rockes that lie off to the Northwardes and southwestwardes of that Island a good way to sea. About 5 leagues north W. or somewhat northerly from Ramsey lieth another great rock, called Mascus, which is all round about foul, with many suncken rockes. He that cometh to saile thereabouts, or to lye by, must take very good heed of them.

The Island Ramsey, or the northpoint of Wales, and the southeast point of Ireland, lie about eastsoutheast and west-northwest distant 16 leagues.

Of the tydes and courses of the Streams.

In Mounts-Bay and at the Lands-end of England, a westsouthwest and east-northeast moon maketh high water.

In Silly a southwest and by west moone maketh ful sea.

A seaboard of Silly in the channell likewise a southwest and by west moone. In the entring of the channell a southwest and northeast moone.

From Silly to the Lizart the flood falleth northeast, and the ebbe southsouthwest, betwixt Silly and Lunday the flood falleth northeast, and the ebbe S.W.

In Silly a southwest and by west moone maketh high water.

On the coast of England betwixt the Cape of Cornwall and Hartland point a westsouthwest, and west and by south moon maketh high water.

Thwart of the Island Londey a west and by south, but on the Island an east and west moone.

At the Island Londey, and at the Holmes, an east and west moone maketh high water.

At Bristow within, a west and by north moone maketh ful sea.

At Milford haven an east and by north, and west and by south moone maketh high water.

In the channell of Bristow betwixt Londey and the Holmes, the flood falleth eastnortheast, and the ebbe westsouthwest.

within the Holmes towards Bristow, the flood falleth northeast and by east, and the ebbe southwest and by west.

Betwixt Lunday and Mildford, the streame falleth northeast, and northeast and by east.

Of the depths.

Silly men may see on the southside in 52 fathom, and the ground there is stony with some red shels.

The lands end of England, men may see also in 52 fathom.

Silly may be seene on the north side in 45, 46, and 48 fathom, there the ground is oasse, with some litle stones amongst it.

When men are to the northwardes of Silly, it sheweth first in two Islands, upon the eastermost they shall see a tower, or litle castle to the eastwardes of the two Islands, they shall see also great two hilly rockes, and to the westwardes three high black rockes.

Westnorthwest and west and by north ten or eleven leagues from Silly, the ground is oasse and soft that men can scarce get any of it upon the lead, there come some litle shels amongst it.

Betwixt the lands end of England and Londey in the fareway, it is 45 fathom deepe, the land of Cornwall, men may see in 44 fathom.

Three or foure leagues without the land, thwart of Saiur Yves, Stouper, or Padstow, the ground is sharpe and rocky, but neerer the land it is all sandy ground.

Betwixt S. Yves and Hartlands poynt are many white chalky hills alongst the coast, especially neere by Stouper or Padstow, whereby this coast it is to be knowne.

In the channell betwixt the Holmes and Bristow, it is deep 12, 13, and 14 fathom, men may see the land on both sides.

Vpon the coast of Wales about Milford, and to the northwardes of it, men may see the land in 42, and 45 fathom.

Courses and Distances.

From the Lizart to the lands end westnorthwest,	9 or 10 leagues
From the lands end to Silly w. f. w.	8 leagues
From the Lizart to the Gulfe, the course is w. and by N.	10 leagues
From the lands-end to the Gulfe the course is S.S.W.	3 leagues
From the Gulfe to Silly west	5 leagues
From Silly to the Caskets east somewhat southerly,	65 leagues

The Coast off England from the Lizart, and Englands end, to the C. de Cornwall,

From Silly to Ufhant, the course is southeast and by south	27 leagues	From Londey to the Holmes eastnortheast	20 leagues
From Silly to cape de Finisterre, south and by west westerly	150 leagues	From the steepholme to the river of Britow northeast and by east	12 leagues
From Silly to cape Cleare in Ireland northwest and by north	40 leagues	From the steepholme to the Naes well northwest about	7 leagues
From Silly to Waterford north, somewhat westerly	40 leagues	From the Naes to faint Gawens point west, somewhat northerly	17 leagues
From Silly to the cape of Cornwall northeast	9 leagues	From S. Gawens point to Mildford haven northwest and by north	4 leagues
From the cape of Cornwal to S. Yves east and by north,	7 leagues	From the Island Scalie to Ramsey northnorthwest	2 leagues
From S. Yves to Stouper point, northeast and by east	9 leagues	From Londey to Milford north and by west and northnorthwest	12 or 13 leagues
From Stouper to Hartland point northeast and by north	9 leagues	From Milford to the cape of Cornewall southsouthwest	32 leagues
From faint Yves to Hartland point northeast	18 leagues	From Milford to Silly southsouthwest, and southwest and by south	40 leagues
From Hartland point to the Island Londey north	4 leagues		
From the cape of Cornwall to Londey northeast and northeast and by north	27 leagues		
From the cape of Cornwall or Milford in Wales northnortheast	32 or 33 leag.		
From Silly to Milford northnortheast, somewhat easterly	40 leagues		
From the cape of Cornwal to Waterford N.N.w. but from Silly north and by west, somewhat northerly	40 leagues		
From Silly to cape Cleare in Ireland northwest and by north	40 leagues		
From the west end of Londey, to Biddeford eastfourtheast	5 leagues		
From Biddeford to Ilfercomb eastnortheast	4 leagues		

Heights.

The south side of Silly lyeth in	50 degrees, or a little more
The cape of Cornwal lyeth in	50 degrees 25 minutes
Londey lyeth in	51 degrees 20 minutes
The Holmes lye in	51 degrees 40 minutes
Milford in	51 degrees 50 minutes
The Island Ramsey in	52 degrees

How these Lands doe shew themselves at Sea.

Mounts bay.

Thus sheweth the Lizart when it is 5 or 6 leagues east and by north from you.

The Lizart.

Thus sheweth the Lizart being east from you 4 or 5 leagues.

Lands end northnorthwest

Thus sheweth the land betwixt the Lizart and the lands-end when the lizart lyeth about east and by north, and Mounts-bay north from you.

Mounts-bay n. e. by n. and n. n. e.

Thus sheweth the lands end, and the land to the eastwards of it when it is northnorthwest, and mounts bay is northeast and by north, and northnortheast from you, being a league from the land.

The lands end sheweth it selfe thus, when you come in right within out of the sea. East

The lands end being east from you sheweth thus. The lands end of England.

Thus sheweth the lands end when it lyeth fourtheast and by south seven or eight leagues from you, and the round Hill to the northwards of it east, then you may even see the low land betwixt them both.

Thus sheweth the Silly, being eastnortheast from you.

When Silly is southeast from you, it sheweth thus.

When Silly is east 5 or 6 leagues from you, it sheweth thus.

When Silly is southeast and by east from you, it sheweth thus

Silly, being southwest from you sheweth thus,

Thus sheweth the land betwixt the lands end of England, and the cape of Cornwall, or the Island bresam, when you are on the black side of the lands end.

Thus sheweth the cape of Cornwall, when it is east and by south from you, so farre that you may but even see it from the poop.

Thus sheweth the land betwixt the cape of Cornwall, and S. Yves, when it is about 4 leagues from you.

Thus sheweth the land, when you are before or thwart of S. Yves, about 5 leagues without the land.

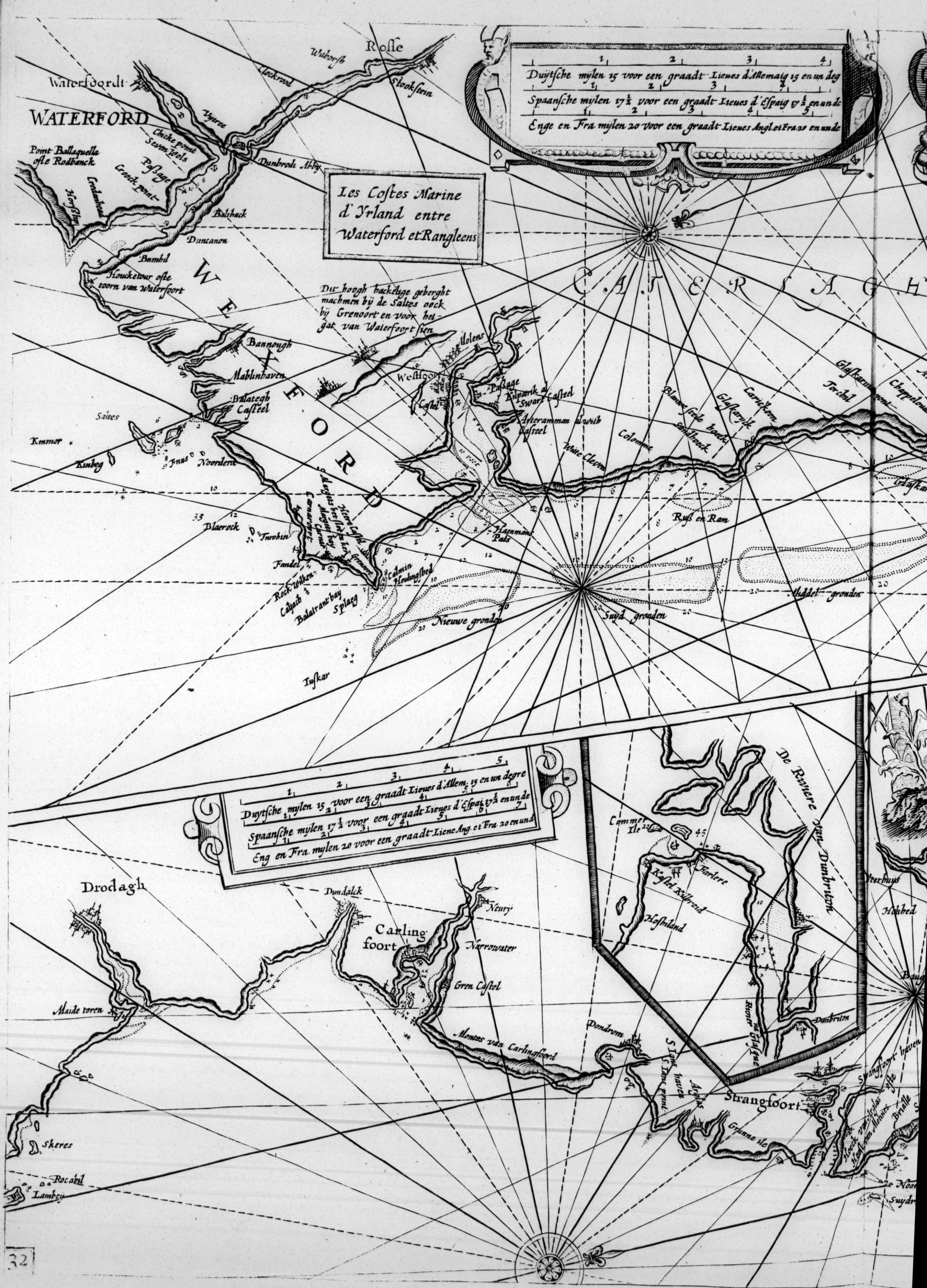
To the westwards of Stouper sheweth the land thus, when you sayle alongst by it 2 or 3 leagues without the land.

The land to the eastwards of Padstow or Stouper sheweth thus, when it is 2 leagues east and south from you.

The land of Stouper or Padstow sheweth thus, when you sayle alongst by it, 3 or 4 leagues without the land,

When the Island londey is north from you, it sheweth thus,

When the Island londey is n. n. w. from you it sheweth in this forme.

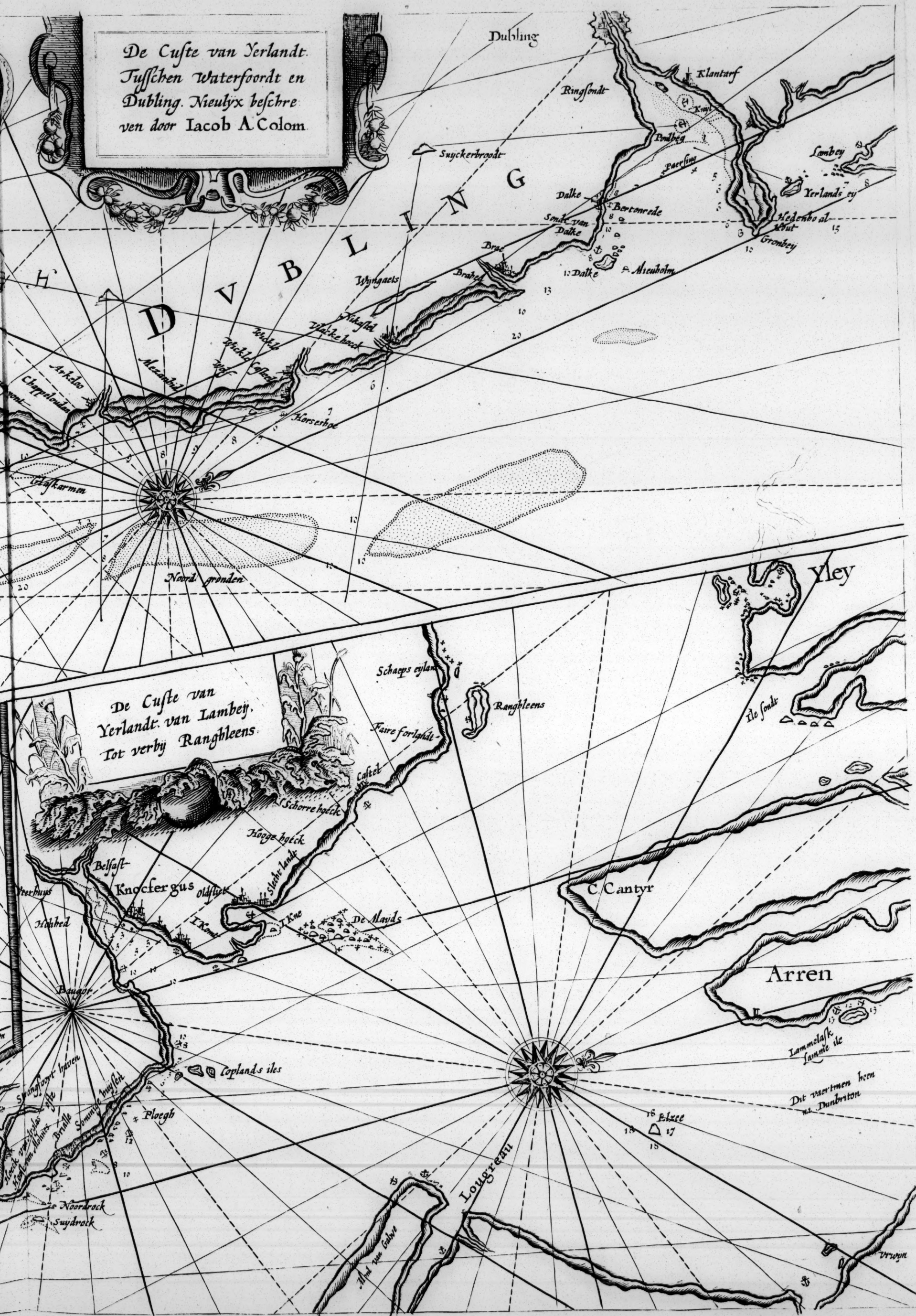


Les Costes Marine
d'Irland entre
Waterford et Rangleens

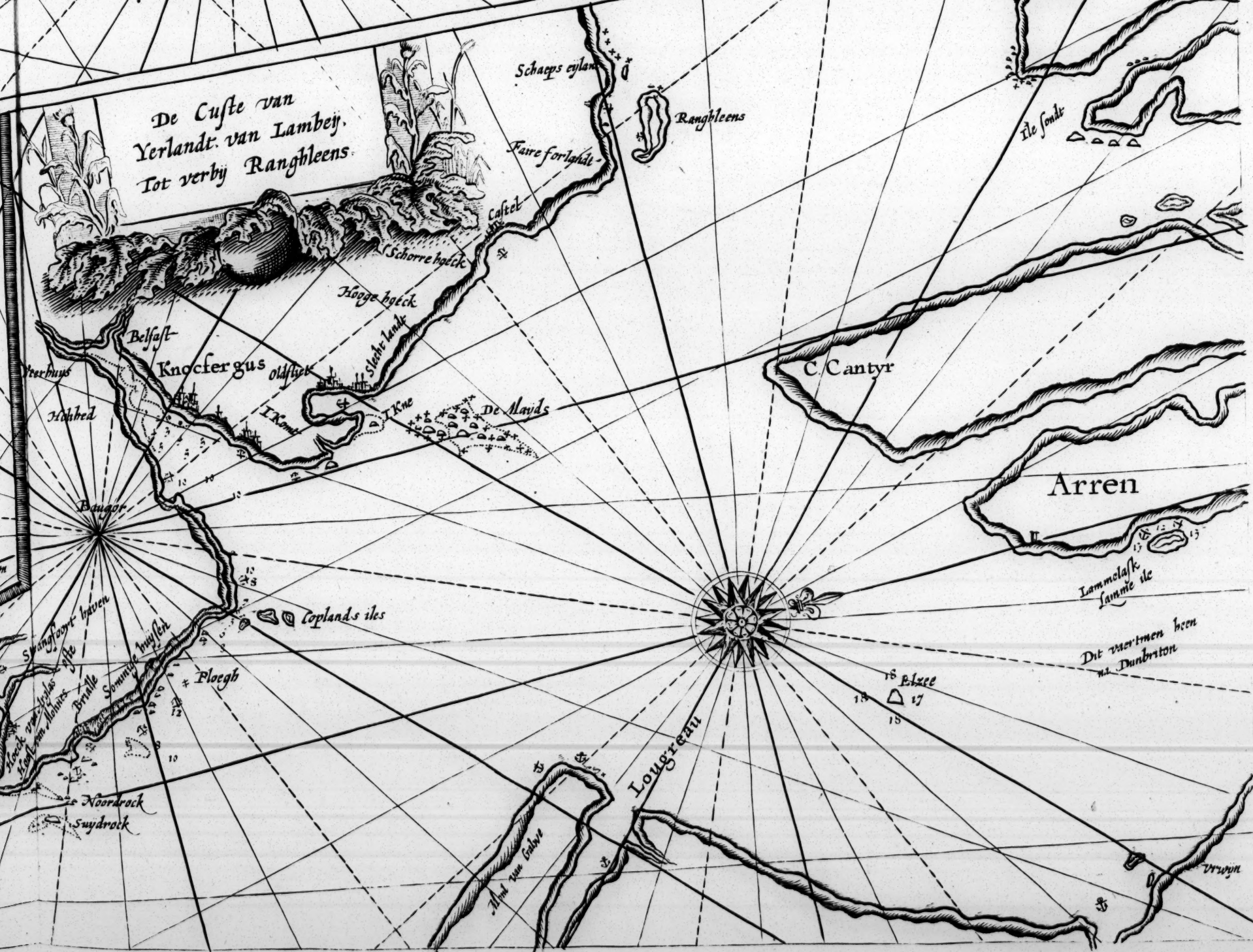
Duytsche mylen 15 voor een graadt Lieues d'Allem 15 en un deg
Spaansche mylen 17½ voor een graadt Lieues d'Espag 17½ en un de
Eng en Fra mylen 20 voor een graadt Lieues Anglet Fra 20 en un de

Duytsche mylen 15 voor een graadt Lieues d'Allem 15 en un degre
Spaansche mylen 17½ voor een graadt Lieues d'Espag 17½ en un de
Eng en Fra mylen 20 voor een graadt Lieues Ang et Fra 20 en un de

De Cufte van Yerlandt.
Tuffchen Waterfoordt en
Dubling. Nieuwlyx befchre-
ven door Iacob A. Colom.



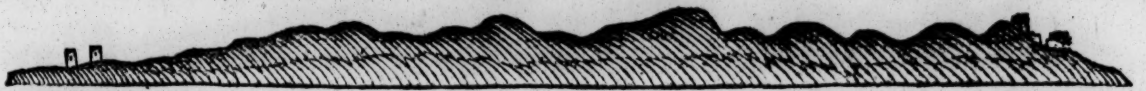
De Cufte van
Yerlandt. van Lambeij.
Tot verby Ranghleens.



The entrance of Ilfercoomb.



White-house.
Thus sheweth Ilfercoomb, when you are right before the entry of it, close by the land.



Axbridge. Ilfrayecomb.
Thus sheweth the coast of England betwixt Ilfercoomb and the Holmes, when you sayle alongst by it.



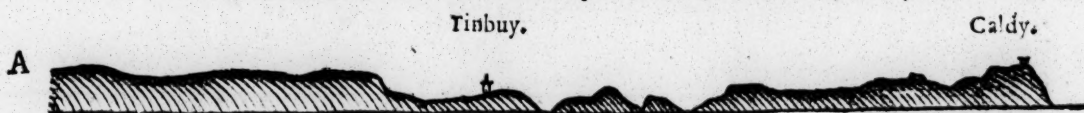
The Naes. Cardief. Sillye.
Thus sheweth the land of Wales from Cardief to Wormeshead.



Thus sheweth the coast of wales betwixt the land Caldly and Milford-haven, when the northermost is northnortheast, and the southermost is eastsoutheast from you, and that you may but even see it from the poope.



The land betwixt Tinbuy and Milford sheweth it selfe thus, when you sayle alongst by the land, as is portrayed in the 2 figures, as the A A belongeth one to the other: the spire of the tower of Tinbuy is very white.



S. Davids-bay.
The land from Milford point unto the point of S. Davids-head, sheweth, as is portrayed in these 2 figures.



From Milford to Tinbuy, men saile alongst by the coast, about 4 or 5 Points, it is most plaine land, like sand-hills. About two leagues to the westwards of the point of Tinbuy, standeth a spire tower, with 2 other small flat little towers more, whereby the coast thereabouts is good to be knowne.

The fourth demonstration,

Wherein the southeast and east coast off Ireland is described betweene Waterford and Band-haven or Rangleens together with the coastes of Schotland lying over against it.

hill of
gar-

From the Landes end of England to Waterford, the course is northnorthwest with that course you shall fall right with Waterford. But from Silly to Waterford, the course is north and by west, somewhat northerly forty leagues: betwixt both it is all oafie and soft ground. Nine or ten leagues in the offing from Ireland lieth a sand banck of forty fathom deepe, where commonly Fishermen lye to fish, that is certaine marck of the distance off the land, when you finde it, in cleare weather, and when there is good sight, then you may see the high mountaine off Dongarvan.

Betwixt Jochull and Dongarvan within in the land, lyeth that said high mountaine farre above all the other Land, shewing it selfe with three toppes, being called Cape de Quin, or Kary Quin. Sayling alongst the south coast of Ireland, you may see it farre off at sea, and lieth northwest from the haven off Waterford, therefore comming out of the sea, and that mountain being northwest from you, and sayling right with it, you shall without fail fall right with Waterford.

Waterford

The haven of Waterford lyeth about five leagues to the westwardes off the southeast point off Ireland, being called Carnaroort, the coast betwixt both lyeth eastnortheast and westsouthwest and sheweth it selfe in the offing, within the land, with high hilles two and three double one above the other, but by the sea side it is all lowe land, where you may see many flat Towers upon it, as you sayle alongst by it. The east point off the haven is a low rock point, but it is cleane, upon it standeth a high white flat Tower, called the Tower off Waterford, which you may see farre off at sea, and is a perfect mark too know this haven by; there stand divers more flatte Towers to the westwards alongst the coast, but this is better to be seen then all the rest, because it is white and higher then the other. The west point is a high and fowle poynt, there lyeth a showld southsoutheast off into sea, from it the channel is broad and cleane, without it, is eleven and ten fathom deep, and in the Havens mouth seven fathom, and somewhat further in fixe fathom, it lyeth in north and north and by west, within this River within the east point is a good

roade in foure or five fathom, a league within the rivers mouth there lyeth on the west side a steepe point, from thence be- ginneth a showld lying to the northwardes alongst the shore unto the steep poynt off Passage, and shooteth over from that poynt with a tayle, towards the east shore. Passage is a vil- lage where men pass over, lying on the west side of the River, a litle to the northwardes of the foresayd steepe point.

Betwixt that village, and that point on the west side a good roade very fit as wel for them that are bound out, as for them that are bound up. In sayling up you must take heede off a litle should, that lyeth off by a cattle (standing on the east side of the River) somewhat thwart over, the river downwardes, at high water there is no more then two foote water upon it, a man that looketh for it, may see it, it is also flat that a man may found it. About halfe a league northwards up the River from Passage, there goeth another River westwards up to Wa- terford.

About halfe wayes betwixt the haven of Waterford and the point Carnaroort, lye 2 litle Ilands about half a league from the shore, called Saltees, the southermost is the greatest and lieth distant from the Tower off Waterford, directly east almost three leagues. Betwixt these two Ilandes, you may sayle through in five, fixe and seven fathom, but you must keep neere the smallest or northermost Iland, for to avoyd some suncken rockes that lye at the north end off the great Iland, and at low water are drye.

From the northermost or smallest Iland off the Saltees towards the maine land, lyeth off a ledge off rockes where men were wont to goe over on foote, but now may saile over. For to saile betwixt the Saltees and the main land, you must leave two thirds of the distance of water from the Ilands, and one third part from the maine, and you shall have at low water about two fathom deepe.

About a half league without the southermost Iland of the Saltees, lieth a rock above water, called Kinbegh, and south- west about so farre from it, and south and by west from the south end of the Saltees lyeth a suncken rock, called Kinmor, of the bigneffe of a ship, it cometh with halfe ebbe even above

water, it is so steepe that a man may lie with a shipps side against it, and have 14 fathom water, so that a man (without any danger) may saile alongst by it, as neere as he will. A man may also (if need require) saile through betwixt Kinbegh and the greatest Iland of the Saltees, but a seaboard of all is best and securest.

To the eastwards off the rock Kinbegh, southeast from the greatest Iland of the Saltees, lye also some suncken rockes, called the Frailes, which may be seen at low water, there men may also saile through within them. Northeast from the Saltees lie also two rockes, the southermost is called the Tuns, and the northermost the north rocke.

Northnortheast from the greatest Iland of the Saltees, or from Kinbegh, and southwest and by south from Carnaroort, lieth one rock above water, called Blackrock, that is cleane and cleare round about, so that a man may saile round about it freely, without feare of danger. But a quarter of a league eastwards from it, lieth a suncken rocke, called the Barrell, of that a man must take heed.

Under the Ilands of both the Saltees, a man may ride, under the greatest at the northwest side neere the north end: the marke or knowledge of the road is, a black rock like a boat turned upside downe, right against that you must anchor in seven, eight or nine fathom, there it is good sand-ground, and landlockt for an eastsoutheast, southeast and a south winde, a southwest winde bloweth alongst the shore. If you anchor neerer the shore in 5 fathom or thereabout, there it is rough ground.

Under the smallest Iland a man may ride at the east side in 7 or 8 fathom, so that the north point of the Iland lye north-northwest from you, there you shall lye neere the landlockt for southwest and northwest windes.

From the point of Waterford the shore lieth to the eastwardes, within the Saltees, eastnortheast, until Carnaroort, with many bayes, and all oasie and black sandy. A man being acquainted there, should for neest, at many places finde good roads, there is nothing that can hurt you except a litle fowle place a litle to the westward of Carnaroort close by the shore.

He that commeth out of Waterford, and will goe about to the southwardes of the Saltees, must not go more easterly then eastsoutheast, for to go cleare of the fowle grounds, which lie to the southwardes of the Saltees, and when the Saltees shal be north of him, then lieth the course from thence to the Tuskar, directly northeast, or a litle more easterly. But for to go alongst without the Tuskar, a man must goe at least northeast and by east to goe cleare of him.

The Tuskar is a great black smooth rock, lying like unto a ship turned up-side down, but is about twice so great, at the north side of it lie also two smal rockes under water. The Tuskar lieth from the point of Grenore S. E. and by E. and E. S. E. distant one league: from the Saltees N. N. E. foure leagues and a halfe, from Black-rock also E. N. E. two leagues & a halfe, & from the Landes end of England N. and by west.

Southeast and by south about ten leagues from the Tuskar, lie two litle Ilands close one by another, about foure leagues from Graholme, called the Smaels, at high water and spring tydes the water floweth over them, the northermost is called Scakum, and the southermost is called Kamay, there lie off in the sea 2 litle showlds from them, the one north N. W. and the other S. S. E. Betwixt the Smaels and Graholme lieth also a ledge of rockes, which at low water may bee seene above water. It is not without great danger to goe through betwixt them both, especially with calmes, by reason of the tyde that runneth very strong there through, and eastsoutheast moone maketh high water without the Smaels.

From the Tuskar east and by south about eight leagues, lieth also a great rock, with many smal rockes round about it, called Mascus. He that commeth from England and wil saile towards Ireland, must take great heed thereof, especially when as through westerly or northerly windes he shal be driven a litle to the eastwardes of the course.

For to anchor under the point of Carnaroort, comming from the west, you must take heed to come no neerer the shore then in fixe fathom, untill that you shall be passed by the high hill that lieth to the westwardes of the point, when you shall have brought out the mill to the eastwardes the length of a capstone barre, then you may anchor in 9 fathom, there is very good riding.

From Carnaroort S. Margets bay, the shore lieth along northeast one league, it is betwixt both rocky and fowle, but the fowle ground lieth not farre off at sea. For to keep cleare without it, you must keepe so far off the shore that you may see the toopers of the double land within about the cliffe land,

and you need not feare, but if you come so neere the shore that the double land within, be covered of the foremost cliffe land, or that thereby it get out of your sight, you shall then surely faile upon the foresaid rockes.

By S. Margets Bay upon the foresaid land standeth a Gentlemans house in the hills, when you have brought that with the mill that standeth within, one in the other, then you may goe into the roade, and leave the rockes which lye above water halfe wayes over the bay, either on starboard or larboard of you, anchor there in five or sixe fathom, sandy ground.

About southsoutheast from S. Margets Bay off at sea, lieth a suncken rocke, that at low water lieth dry, called Caliach, for to avoid it, take heed unto these markes: when you come from Carnaroort, and have Black rock with the great Iland of Saltees one in the other, and keep them so, and then saile on northeast, you shall goe right upon this suncken rock. For to goe to the southwardes of it, then keepe Black rock with the smallest Iland of the Saltees one in the other, or els for to goe to the northwardes of it, keep Black rock without or to the eastwardes of the great Iland, and then you shall not need to feare any danger of this suncken rocke.

From S. Margets bay to the point of Grenore, lyeth the coast northeast halfe a league.

The point of Grenore is not very high, but steep and flat on the toppe, off from it goeth a showld about a quarter of a league into sea east and by south, of very rocks and stones, the which at low water falleth dry a good wayes of the shore. The ships comming from the southwardes that are bound for Dublin or Walford, goe in commonly betwixt the Tuskar and the foresaid rockes of Grenore, for to com within the banks or sands. Oftentimes they goe into Waterford for to hire a Pilot to bring them up. For him that will be his owne Pilot, wee will describe all the markes that are to be taken heed of, as well for to saile into Grenore, as also into the deep or haven of Walford, as they are now at this tyme, and hereby doe advise men that they doe not alwayes continue so, because by reason of the floods, the channell doth shift, and stretch it selfe out more northerly, and also waxeth deeper.

Commig out off the sea about a league or two neere unto Grenore, you shall see the high ragged double land high above the point of Grenore, which (as is aforesaid) is not very high, but flat on the top. By that said high ragged double land within, men do know the entrance of the channell of walford, when men doe come from the southwardes and the eastwardes. When you have sight of the point off Grenore, you may boldly goe right with it, untill that said double land, doe shew it selfe, by estimation, but a mans length above the point of Grenore, as sheweth this figure.

The high land over the point of Grenore.



The flat foreland of Grenore.

Then are you farre enough from the shore, not to bee in any danger off the should off Grenore: Or els you may fit your selfe that you come no neere the shore then in fixe or seven fathom: but yet for need a man may borrow off the showld in five fathom, or foure fathom and a halfe, but you must also take heed that you goe not so farre off from it, that you have more then eight or nine fathom depth, otherwise you should come to neere the banck that lieth to the northwardes of the Tuskar, which on the inner side is very steepe and needle to, upon it is no more then twelve foot water, and close by it ten fathom deepe. If that you keepe the foresaid ragged high land as is before said a mans length above the land of Grenore, and so saile to the northwardes, so long untill you bring that same high land without or to the northwardes of the steepe point of Grenore, then are you yet right against in the showld, and must yet saile to the northwardes, keeping the mill that standeth next unto the point of Grenore, so that you may see the top of it even right over the steepe point off Grenore. When you keepe it so, you shall not be in any danger of the showld or riffe. Then as soone as you see a castle (which standeth a litle without the strand) come without the point of Grenore, then may you boldly saile towards it, by your lead, into the Bay of Grenore.

The said mill stands upon the land off Grenore, a litle within, the land, that can serve for a mark for not to come to neere as well to the shore as also to the showld or riffe, for if you come not so neere the shore that you keese the mill out of your sight, but keep so far off, that you keep sight of it, then doe you keepe farre enough from the shore, and from that rocky showld or riffe. Then when the mill shall come to be southwest and southwest and by south from you, then you are

The Frailes

Tuns and northrock

Blackrock

Barrell.

Road under the Saltees.

For to avoid the fowle grounds of the Saltees.

Tuskar.

Smaels.

Mascus rock.

Road under Carnaroort.

Caliach.

Marks for Caliach.

Riffe off Grenore.

For to le out Cree

For to washford.

Shou wasfo

Greenby

are even passed the showld or riffe, go then northwest and by west, and northwest, according as the winde and tide shall be into the Bay of Grenore.

Or els you may observe another marke: Sayle on so long north, untill that you see a long black house come out to the westwardes off Grenore, upon the low land, the which sheweth like a black rock upon the land: then you may looffe on to-wardes the shore in foure or five fathom alongst by the riffe, and run in so untill that you get six or seven fathom, and presently afterwarde shal be eight or nine fathom deepe, but then afterwarde it showlds by litle and litle, as you come neere the shore.

If you have a large winde: then sayle so long to the northwards untill you see another litle black house come out without the point, sail then unto it, you shall (so doing) have no danger of the riffe.

In the Baye it is should water, you may lie there so neere the shore as you please, in six, five, foure, and also three fathom, and there you can get a Pilot to bring you to Washford.

For to faile out off Greenbay

For to faile out of the Bay of Grenore, you may run out so close by the shore, that you may see but the wings off the mill over the Foreland, and so goe on eastfoutheast in to sea alongst by the riffe, or according as the winde and tyde shall bee, so long untill that you may see the rooffe of the mil, then you may goe larger, and by litle and litle goe more southerly, and then you shall see it ripple upon the riffe.

For to faile to washford.

For to faile out of the Bay of Grenore towards Washford with a ship that draweth litle water, you may boldly runne alongst by the shore, and faile through betwixt the Haenmans path and the Souder, that is a channell where at high water and ordinary tydes is eight foote water, but with a spring-tyde there is ten foot water.

The Haenmans path is a dry sand, which maketh the south side of the channell of Washford, lying off from the Souder.

The Souder that is the south poynt of the maine land of Washford haven.

Should of washford.

But if your ship goe deeper, then you must (sailing out of Greenbay) goe further off from the shore, for to come without the sand that shooteth off from Haenmans paths, yet you must also take heed not goe to farre there off, for if you come so far off in ten fathom, you shall come to neere unto the banck that lieth without, which is on the inner side very steep and needle to, therefore go no further of the shore then in seven, eight or nine fathom, but comming somewhat more northerly about Haenmans paths, then you may wel goe off into tenne and eleven fathom; also you may not come neerer Haenmans paths then in seven fathom.

If you desire to be upon the barre off Washford and to leave the showld of Haenmans paths, to with, to goe to the northwards, then take heed unto these markes: At the north side of the channell off Washford lieth a high hil with a round hommock, which is to bee seen over the Foreland, and a litle castle in the low land, a litle above the strand against the land to looke on; bring that round hommock a litle to the northwardes off the castle, and saile so in, but bring not the hommock within or to the southwardes off the Castle, for then you should bee in danger of the sand of Haenmans paths, unlessse it were by neede, and with a bare wind, then you might borrow so neere to bring them one in another, and so to faile in, but it is best to keep them somewhat out one off another, to with, the litle Castle to the southwardes of the hommock.

If it should happen that you could not see these foresaid markes wel, nor discerne them, then you may goe about the sand of Haenmans paths by your lead in seven fathom without any danger.

For to know then when you are far enough failed to the westwardes, or are past Haenmans path, and are open before the channel, you shall see in the south-land a litle Castle that standeth about foure leagues in the land within the strand, in the side of the high land of Washford, about south-west and by west from you, when that shall bee upon that point from you, and that it standeth betwixt the two northermost litle sand-hills, that are upon the foote strand off the Souder (which is upon the south shore) then are you past Haenmans paths, saile in then upon the marks of that litle Castle, and the litle sand-hills over the barre of the haven; there it is at high water about sixteen foot deepe.

As sone as you are past the outermost flat at the point off Haenmans paths, you shall goe somewhat neerer to Haenmans paths, although it bee very steep, that the tyde doth no bring you upon the taile off the north-grounds, where the mast standeth, that is a fore-mast off a shippe that is there lost, and lieth the suncken into the sand, by the fore mast the

north grounds are very steep and needle to, but without and within very flat going up.

In this channel and upon the Barre an east and west moone maketh highest water: but the flood runneth yet afterward a half tyde strong by the channell to the northwards, so that when it is highest water in the channel and upon the Barre, yet runneth the tyde thwart over the channel, therefore a man must keepe him so neere to Haenmans paths, as is said, that is the cause that the tayle of Haenmans path is cast up still more and more to the northwardes, and that the channel now lieth out more to the northwards then it was wont to doe: And yet hereafter it is like that it wil stretch it selfe more to the northwards, so that the foresaid markes (by the likelihood) wil not continue certaine alwayes. Even as the flood after the highest water, runneth yet a half tyde or 3 houres strong (in the channel) to the northwards, so also runneth the ebbe a half tyde to the southwardes after the lowest water, but not so strong as the flood.

Being over the shouldest of the Barre, you shall have 3, three and a half, and foure fathom, and in the channel betwixt the north grounds and Haenmans paths against the mast 5, fathom depth, runne in by Haenmans paths, al alongst untill you come to the foot strand, and then edge over to the north shore, for to avoid the grounds which lie to the westwardes above the Souder, you may, borrow of the showld on the north side, by your lead, into ten or eleven foote, according to the draught off your shippe. In the right deepe off this edging over, you shall have at high water, fiftene foote depth.

The marke of this edging over is a white litle castle that standeth on the north side of the haven in the valley of the Land, when that commeth over the steep point of the innermost lland to the two that lie by the north shore, and seemeth to be about a mans length high, then you may boldly run in northwest with it, untill that a litle chappel within the Land, and to the southwardes of Washford) a litle or about a cables length to the northwardes of that other forenamed litle Castle on the north side of that high ragged land, that hath served for a marke to saile over the Barre) cometh over a black hommock that you may see upon the high land, a litle to the southwardes off the Castle of Washford, when you shall have brought these marks one in the other, edge then over again to the south land upon the marks for then you shall be above the sands of the Souder; and with that course also shall not be in danger of the taile of the sand that shooteth off from the point of Passage, which is on the north side, but it is there broad and large, that a man may there turne to and againe, it is altogether should water, of 10 and 10 foot and a half at high water. Sailing up upon these foresaid marks, you shall come about the distance of a shot of a cast peece without the castle of Washford to the south shore saile then in alongst by it, and keep the sounding on the sounding of the shore untill you com within the castle, there you may anckor, and shall find there about 3 fathom water; For a man that is there unacquainted, it is best to anckor there, because before the towne lie some suncken rocks; he that wil lie before the towne, must (right against the kay, or the head of market) go a good ways off the shore, because a sunken rock that lieth thereabouts, and go right against the west end of the towne, and anckor there in 3 fathom, or thereabouts.

To the southwardes of the sands, that lie to the westwardes or above the Souder, goeth a dreeke through, there is more water then in the edging over to the northwardes off the sands. The marke for to sail through there is: That you keep the highest hommock of the high ragged land (behind Washford) right over the castle of Washford, but there can be nothing gotten by it, with sailing through there, in regard you must nevertheles go over the showldest, after that you are passed the sands of Souder, to wit, over the foresaid depth of ten and eleven foot.

For to sail out from Washford, with a ship that goeth deep, you may not lade no deeper then ten foot, or ten foot and a half for to come over the foresaid should, you shall then sail about to the northwardes of the showld that lieth within, or to the westwardes of the Souder, and goe in and anckor betwixt the should and the Souder, there you shall be landlockt for al wiades, except for the southwest winde you have litle shelter, you shall therefore bring out your best anckor, in the south-west, and the other in the northeast, because that the winds that com out off the southwest over the land, doe not put you upon the north grounds. There at the Souder, you may take in the rest of your lading, it is a league from the towne.

If you will anckor before the Barre of Washford for to stay for

for the tyde, you must anchor a litle to the northwards of the Barre, and go of somewhat until you have 8 fathom, there it is cleane sandy ground.

In the night there are two fires made upon the Soudre for the Fishermen for to come in by night, by the Haenmans paths, he that will saile in by them, must keepe the highest fire a litle to the southwards of the other, for to avoyd the north grounds.

Besides the deepe alongst by the Haenmans paths, the Fishermen have a litle channel that goeth out close by the north shore, it is there about sixe foot deepe at high water.

Channell
through
the bancks
before
Washford

From the Barre of washford a man may saile east and by S. and West and by north out and in through betwixt the banks into sea, or out of the sea, that is a large and broad channell.

For to saile from the Barre of Washford vwithin the sands through tovwards Dublin, you must keepe the founding of the shore, and runne alongst by it in fixe, seven or eight fathom, you shall so saile alongst about a cables length from the shore, which is very cleane without any danger, so that any man (having but a litle knowvledge of the Land) may sayle there alongst by night, only you must take heed not to goe further of the shore then in 7 or 8 fathom, for not to come foule of the banckes, which are on the inner side very steepe & needle to.

When you are sayled to the northwardes alongst by the shore, about two leagues from the Barre, you shall see three white spots or rockes in the sand-hill, a litle to the N. wardes thereof standeth a peece of a Wall, much like a pillar of a Church: Right against this pillar, a great English mile from the shore, beginneth a sand, called the Rutch and Ramme, lying from thence alongst the shore to the northwardes, you may sayle about it on both sides, but it is best to keepe the shore, and to runne through there within in fixe or seven fathom, as is sayd out off feare of the outtermoost banckes, which are very steepe, and therefore cannot bee founded; Therefore men doe seldome use to saile there a seaboard of this sand.

Right against this forenamed Rutch and Ramme, the shore maketh a Bay unto the point of Glaskarrick, when you are so farre is this point, then you are past the foresayd sand.

Point off
Glaskar-
rick.
Channell
through
the banks
before
Glaskar-
rick.

The point of Glaskarrick is a low point, a litle to the northwardes of it standeth a castle.

When you are without the banckes in the north channell, and desire to come within the banckes, then keepe that castle (if you can get sight of it) a litle to the northwardes off the low point, and runne boldly right in with it, unto the land, without feare off the grounds, there is a good channell, through the banckes; you shall not finde lesse depth then fifteene or sixteene fathom, untill you come to the shoulding up against the shore. This Channell lieth in northwest.

Glaskar-
men.

For to sayle from Glaskarrick to Dublin, run all alongst by the shore (which is somewhat full of Bayes) and keepe you (as is fore) in eight, seven, or fixe fathom. Two great leagues to the northwardes off Glaskarrick lieth a sand, a great halfe English mile from the shore, called the Glaskarmen, the ground is very uneven betwixt both. But nevertheles run through within that sand and keep the founding of the shore, but not so far from it, that you come into ten fathom, for then you should saile close alongst by the Glaskarmen, which is very steepe, and about two English miles, or a halfe Dutch mile long.

Arkelo-
head.

One English mile to the northwardes of Glaskarmen lieth the point off Arkelohead.

Marckes
for to a-
voyd the
Glaskar-
men.

Sailing through between the shore and Glaskarmen, to the northwardes, a man may see 2 points, to wit, Mizanhead and to the northwardes off it Wicklohead. If you keepe Wicklohead even within the point of Mizanhead, then you can take no hurt of the Glaskarmen. But if you would saile a seaboard off the Glaskarmen, then keepe Wicklohead a good wayes without the Mizanhead, and so runne alongst a seaboard off it, and you can take no hurt off it: But if you keepe the point off Wicklohead but even without the Mizanhead, you shall not sayle to saile upon the Glaskarmen.

Ledge at
Arkelo-
head

At the north point off Arkelohead lieth a litle stony ledge very steepe and needle to. A man must take most heed off it (comming from the northwardes) & bound to the southwardes, and then must come no neerer it then in five fathom, towards the shore lye some litle rockes above water: when you come from the northwardes, and those litle rockes are westnorthwest from you, then are you passed it, to wit, to the southwardes off that ledge, and then you may againe borrow of the shore, upon the lead, commonly men doe keepe so farre off the shore, that they can take no hurt of the foresaid ledge.

Baye off
Arkelo

At the north side of the point off Arkelo is a faire sandbay, there is a good anchor ground, & alle over good riding in 8, 7, or five fathom, in this bay are good store of herrings caught.

Right against Arkelo runneth also a channell through the banks into the sea. For to saile in there out of the ses, looke out for a round hill within the land; bring that westnorthwest or west and by north off you, and sail then in there boldly, keeping it so. But if you bring the round hill west of you, and saile so in, you shall saile upon the point of the northgroundes, it is in that channell about seven or eight fathom deepe.

About an English mile to the northwardes of the point is the river of Arkelo but very shewld, at high water there cometh no more then fixe foot water.

The coast of Washford unto Wickely lieth most north and by east, a litle more easterly: But he that will saile without alongst by the banckes or sandes, must not goe more northerly then northnortheast, for to avoid the grounds which lie about Wicklo, three leagues off from the land. And to the southwardes the south groundes ly scarce a league from the shore, there not long since a pilot keeping bad reckoning run without the sandes alongst north and by east, and sailed thwart of Arkelo, behind a taile of sand that lieth off from the north to the southwardes, and there lost his shippe. Arkelo lie from them (when they sat upon the sand) west and by south.

About two leagues to the N. ward off Arkelo lieth Mizanhead it is a black head. Betwixt Mizanhead & Arkelo in the farevay it is 8 & 9 fathom deep, it is also betweene them both alongst the whole coast, good anchoring & cleane ground.

From Mizanhead to Wicklohead it is also 2 leagues, but this reach is shorter then the other to Arkelo.

One English mile to the southwardes of the point of Wicklo, lieth a litle rock close by the shore, called the Wolf, it cometh at half tyde above water, the Fishers boats run through vwithin it, but it is not to be done vwith shippes.

Right to the southwardes of Wicklohead, somewhat further out then the point, lieth also a rocky sand, called also the Horse-shoe, close unto the point, about south and by east from it a man should for need (when hee cannot do better) saile through there vwithin it, but he must be very well acquainted vwith it, or els not vwell to be done, vwithout, it is more certaine and best going off somevwhat to the deep. If you keepe the point of Brahead a litle vwithout Wicklohead, then you can take no hurt off, it or if you keep the high inner land, so that you may even see it above the land of Wicklo, and goe not altogether hidden behinde it, then you goe there vwithout it in 5 fathom.

The point off Wicklo is steepe and stony vwith a double top litle hill, within standeth a litle chappell, vwhen you can see that through the saddle off the hill, then you are right against it, and have it on your side, the village of Wicklo lieth to the northwardes off the point in the Bay, there is a litle haven, vwhich at high vvater hath ten foot vvater.

In the Bay the ground is so hard & chinnell, that the ankors doe not hold there, but without the Bay somewhat farre from the shore, towards the Banckes, the ground is somewhat better.

Thwart of Wicklo also is channell through the bancks for to saile that out or in, keepe the Castle of Wicklo, that you may see it upon of the poynt, thereupon you may boldly saile out or in.

Fourteene English miles from Wicklo lieth the point of Brae, a high steep stony point, and the high land there about on the sea coast.

Betwixt Wicklo and Brae lieth out a flat point with a litle Fisher village, called Nicastell, there (sayling alongst) you have foure five and fixe fathom deepe, but from the flat point unto the steepe point of Brae, it is well fourteene fathom deepe, the land lieth thereabout north and by north and by west.

Within the land lieth a high hill, off fashion like a sugar-loafe, that is the farthest in the land of the three hills, which they call the Vineyards, when you have them through one another, and are northwest, and so keepe them, then may you boldly thereupon run through the banckes into sea, or out of the sea, upon these markes you may come in within the banckes, that is a very large and broad channell.

Thwart from that foresaid sugarloafe to the southwardes off Brae lieth a banke that is not deepe then 4 fathom, very stony and sharp ground.

Brahead is very steep, likewise also the ground by it, is 10 fathom deepe close by the shore, to be northwardes of the point lieth a litle tyde-haven, there stand the houses called Brae on the north side.

From Brahead to the Iland Dalke (lying at the south point of the Bay of Dublin) the course is north and by west 4 English miles, there betwixt both goeth in a Bay.

At the N. E. side of the Iland Dalke lie some rocks, lying alongst the maine not far from it. Men sayle within the Iland through, & leave al the rocks and the Iland lieth to seawards.

The

The Sound of Dalke. The Sound betwixt the iland Dalke and the maine land, is called the Sound of Dalke, it lyeth northnorthwest, and north and by west through, it is seven, eight, and nine fathom deepe men may anchor under the iland, nearest the Land, there is good sandy ground, or somewhat further in, there lieth a round rock, nearest to the maine land, there men may make fast a Cable on it, & an anchor thwart of the channell, towards the other rocks, because of the tydes, for the tyde runneth there very strong through. A S.S.E. and a S. and by east winde bloweth there right in, but in regard it is there very narrow, there can goe no great sea, with a S.E. winde you are landlockt of the iland, and a south winde commeth of the maine land.

From the iland of Dalke, untill you are passed the village of Dalke, the shoare lyeth north northwest and by west, before the village you have some succour for a southeast winde, the winde being more easterly, you lye in the open sea. You lye therein 8 or 9 fathom, the nearer the iland the deeper, the place is called the Berton road, you may not anchor further to the westwards then before the village: to the westwards of the village the ground is foule and sharpe.

The north point of the Bay of Dubling, called Houth or Hedehoo, is a very high point, it seemeth a farre off as if it were an iland, but it is fast to the maine land with a small and very low necke: To the northwards of it lye the iland Irelands-eye and Lambey, those may bee seene (being to the southwards of the point Houth, and being before the entrance of Dublin) over that foresaid small necke of Land.

From the Sound of Dalke to the Barre of Dubling, the course is N.N.W. in the farre way it is deep 9, 8, 7, 5, & 4 fathom the nearer the Barre the shoulder water. When you sayle up, you must keepe the westernmost Rocke that lyeth without at the iland of Dalke, a handspikes length open of the iland, or the other rockes, and shall so come before the entrance, without having any let or hinderance of the sand. Or you may sayle more to the eastwards right towards the low land of the norther shore, and then by your lead alongst by it to the Barre.

If you come from the northwards, you may runne in close about the point of Houth by your lead, and then all alongst by the norther shore, untill you come to the mouth of the Barre, there alongst it is deepest water, but towards Dalk it is shoulder. From the south shoare runneth of a great tayle of sand, almost unto the north shoare. To the northwards of it goeth the deep in. Upon that tayle a litle within the point stands a Beacon of a mast, made by the Englishmen called the Paersing.

paersing. For not to come to neare this foresaid sand, comming from the southwards, looke out for the iland Irelands-eye, keep that so, that you may but even see it over the low land close after unto the high land of Houth, so you can take no hurt of that sand. When the Tower of Saint Patrickes in Dubling, which standeth on the land side of Dubling, commeth right over that beacon the Paersing, then are you yet right against the point of the sand which shooteth out a good way to the northwards of the Paersing. For to goe cleare of that, you must runne so farre to the northwards, untill the Paersing commeth right over a litle Castle with three turrets, or litle towers, which standeth to the southwards of the town, or when the Paersing commeth betwixt that foresaid litle Castle, and the towne, then are you above the point of the sand, then goe in west and by south untill you come over the shouldest of the barre, there is at spring tyde 15 or 18 foot water, but at low water and neeptyde, not more then six foot, you may sound it on both sides. When you are over the shouldest of the Barre, then anchor within the sand by the beakon in Poelbegh, there it is at high water foure fathom deepe. The marke of this road is, that you bring that afore written hill like a Sugarloafe that here before is spoken of, and serveth for a marke for to faile by into the Channell of Wicklo over another lower hill, then are you in the best of the road, bring out your best anchor in the southwest, against the blowing of the southwest windes, which sometimes come powing downe there very strong out of the S. W. over the high land, and the other in the N.E. At low water the sands lie dry there round about the road.

Road by Poelbegh. Men may also anchor somewhat further in, at the north side of the sound, right against a village called Clantarie in a pool, where at low water remaineth 9 or 10 foot water: but round about the ship (as it is in most places of the haven) it doth fall altogether dry, so that there a ship hath but even roome to winde up to again. Men do morre there S.S.E. and N.N.W. A S.E. and N.W. Moone maketh there the highest water.

If the ships that come there be any thing great, they must stay in Poelbegh, close before the Town it is very shoulldly, and falleth at low water altogether dry: with an ordinary tyde men cannot come before the towne with a shippe that draweth

5 foot water, but with a spring tyde with ships that draw 7 or 8 foot water.

At the north side of the river, a litle further out then the town, right over against Ringsend, lieth a litle iland, within it is a fit place to make ships cleane.

The sands or bankes that lie alongst this East Coast of Ireland from the Tuskar unto Dalke, are on the south side, or on the east side very steep and needle too, so that men may not come nearer them then in 24 and 25 fathom, in 20 fathom men are close by them, they are not deeper at some places then in one fathom, or one fathom and a halfe: but at the north end by Dalke, about two fathom and a halfe, and three fathom deepe, all stony ground, and lye on the of side alongst northnortheast, and southsouthwest, at the north end they lie about 8 English miles from the land. If you are bound for Dublin, and will go without these sands, run then so far to the northwards, untill you can see the litle iland (Irelands-eye) without the point of Houth or Hedehoo, run then right on to Houth or Hedehoo, and then you shall take no hurt of the north grounds.

The N. point of the Bay of Dublin called Houth, is round about cleane, so that a man may anchor round about it. To the northwards of it lie the ilands of Irelands-eye and Lambey. Irelands-eye is the smallest, it lieth betwixt the foresaid point Houth and Lambey: at the west side of it standeth a litle chappell, right against it, you may ride. At the S. end lieth of a stony riffe which must be avoided. Right over against that iland in the maine land lieth a haven for small ships, at a litle town called Malcheall.

Malcheall Lambey. Under Lambey you may ride upon the north side for a southerly winde, in 12 and 13 fathom, but for a sea winde, you must shift, unto the west side by a Gentlemans house, and anchor there, but it is not very good lying there, because alwayes there commeth in a great sea.

About 5 leag. N.W. and by N. from Lamby, lieth the haven the land lie rocks, called the Skires. About two miles to the northwards of Lambey lieth a great rock called Rocka Bill, you may run round about it on both the sides.

Drodagh hath a narrow crooked haven, which is not good to come into without a Pilot, or some one that is well acquainted with it.

Foure or 5 leagues to the northwards thereof lieth the haven of Dondalk, which is very shoulld, and litle used, at low water a man may go over a foot.

North and by west about thirteen leagues from Lambey, seven leagues to the northwards of Drodagh, and two leagues from Dondalk, lieth the haven of Carlingford: the north point of that haven is somewhat foule and rocky, but you may goe in about it by your lead: the south point is very foule with rocks and suncken rocks, which you must shun, and runne in by the northerne shoare: Some say that men may runne in through betwixt the rocks and the souther point with small ships, but it is not without danger. When you are within the suncken rockes, you must runne over to the souther shoare, and in alongst by it, untill you come before the town of Carlingford, and anchor there in six, seven, or eight fathom, so shallow as you will, you may faile in upon the oafe and save a ship without anchor or Cables. Green-Castle lieth at the northeast side of the haven, two miles from Carlingford.

About 7 leagues northeast or somewhat easterly from Carlingford, lieth a point called S. Johns point: betwixt both about S. Johns half wayes lieth the mount of Carlingford, a high Mountain. From S. Johns point lieth of a ledge of rocke, whereof you must take heed. A great league to the northwards of S. Johns point, lieth Arglas, from thence forth to the haven of Strangford it is 3 small leagues.

From the north point of the haven of Strangford, lieth off a foule ledge of Rocks. A litle of from the south point lieth a suncken rocke, which at halfe ebbe commeth above water. For to faile into this Haven, you must leave this suncken rocke on the larboard side, and goe to the northwards of it, but must take good heed of the foresaid ledge at the north point. A man may also goe in through to the southwards of the foresaid suncken rocke, betwixt it and the point (but to the northwards of it) is the best and the broadest Channell. Somewhat further in lieth also another suncken Rocke at the N. E. side, that must bee left on the starboard side in going in. When that you come then so farre as Audleys Castles, there you may anchor or runne in about the point on the larboard side, and anchor thereunder it.

About a league and a halfe to the northwards of Strangford lie the Rockes Southrocke and Northrocke, of them read as followeth.

From Strangford Haven to the Northwards lyeth the coast forth N. N. E. one league unto a point which some do call the point of Arglas, others the point or head of Molines; from thence falleth away the coast unto the Bay off Knockfergus northnorthwest.

Point of
Arglas.
C. de Mo-
lines.
Southrok
Northrok

By the foresaid point of Arglas or cape of Molines, to with, to the northwards of it, two little miles, lye two great rockes: the southermost is called the Southrocke, it lieth about two miles to the southwards of the northermost, called the Northrocke. From the south end of the Southrocke lieth a ledge off rockes at the least two miles off, also one from the northeast point a great wayes N. E. off into the sea. The N. rocke is a great plate of rocks, whereof many at high water are under water. There goeth also from it a foule ledge off unto the land, so that a man may hardly sayle through betwixt the rocks and the maine land, except a man be extraordinary well acquainted. But betwixt the northrock and the southrock goeth a faire broad Sound through, where men may well turn to and again, and at many places may ankor, it is all over good clean sandy ground, 6, 7, and 8 fathom deep.

From the E. side of the southrocke unto the llands at the E. point of the Bay of Knockfergus, called Koppen, or Kopland lles, the course is N. N. W. or somewhat more northerly, about six leagues: for when men sayle from the E. side of these llands to the southwards, with a S. S. E. way, they goe farre enough without the north and Southrocks. There betwixt them both lye divers more little Ylands, rocks, and suncken rocks, and showlds, for the which men must take good heed when they will come neare by the shore.

The Koplands lles lye about an English mile from the land, they are on the off side to seawards, cleane, but from the inner side there goeth of some ledges and foule ground, in the mid-way there going through it is five and six fathom deepe, but it is best to goe without, except for them that are well acquainted. The N. point of the Bay of Knockfergus, lyeth distant from the Copland lles 3 or 4 leagues N. W. or somewhat northerly, for which a S. E. course from the north point towards the foresaid Ylands, that goeth farre enough without them.

Bay of
Knockfer-
gus.

The Bay of Knockfergus is a great broad Sound; about 3 leagues inwards in the Bay W. from Copland lles, is the road before Knockfergus, there is good ankor ground in 3 fathom and a halfe. Somewhat more further out towards the N. point also on the N. side off the bay, standeth a Castle, called Mousfells Castle, by it is a sandy bay, where is good ankor as well for great ships as small, for the N. and the N. W. winds, but a southwest winde maketh a bad road in these places.

Kow lland

A little to the N. wards of the N. point of the bay of Knockfergus, lieth a little Yland called kow, from thence lieth the Coast off Ireland forth N. N. W. about 9 or 10 leagues unto the llands of Raghleens. Betwixt them both lye the 9 Maydes one great league without the land, and two great leagues to the northwards off the bay of Knockfergus, they are great Rocks, that lye but litle above water, or low rocky little Ylands, and a multitude of rocks under water about them, that lye off so far to the N. N. E. that men cannot come neare them within 5 or 6 English miles. There goe some Creekes trough the foule grounds, where men (for need) might saile through, but it is no wisdom to go about it, when there is no need, and that men can do better. Not very long since, there came a man (by night unacquainted) therein, and runne through onely upon the sight of the breaches of the water, & got through without any hurt, but not without great feare and danger. He that commeth off from the faire Forland, must (at least) goe S. E. and by E. for to runne alongst cleare off these foule grounds. From the W. side also lieth off a little tayle off a ledge off Rockes towards the land. Further, it is there cleane, that men may sayle through there within, but men must not come nearer the Maydes, then about halfe channell betwixt them & the maine, but the maine land so neare as they will, which is both cleane and cleare, with many bayes, where men may every where ankor, yet here & there lie some Rocks, but they are all above water: There is nothing that can hurt you, but men may easily see it.

Oldflit.

A great league to the northwards off the north point of the bay of Knockfergus, & a halfe league S. S. W. from the Mayds, lieth a haven called Old-flit. For to know it when men come from the northwards, they shall see two flat little Towers, the one somewhat higer then the other, like as if men saw a ship with maine sayle and foresayle, without toppe or toppe-failes: these stand upon the north side of the bay.

lland knee

At the S. point lieth a small round litle Yland or rock called the Knee, a special marke for to know this Bay; men run in there amidst the channel. But when you come from the S. wards, & get sight of the little Yland Knee, then run in close about it.

From Old-flit to the northwards unto faire Forland, the coast is very cleane, that you may saile close alongst by it, boldly without any feare, except you runne farre off from land, without the foresaid Maydes towards the Scottish coast.

Faire Hid, or Faire Forland is the outermost north east point off the maine land of Ireland, and lieth a little to the southwards of the Yland Rachleens, so that this point and the e. point of Rachleens, ly neare about f. & n. one from the other.

At Rachleens, or Faire Forland the north east point of Yreland, come Scotland and Ireland neareft one to another. The Rachleens is an lland that men may sayle round about, either to the northwards or to the southwards, as they will, according as it happeneth best convenient with winde and tyde. At the southwest side is a faire bay, where is good lying almost for all windes. When men come from the west it seemeth to the S. wards of the Rachleens to bee close without any opening, because the eastermost point of Ireland Faire Forland, lyeth somewhat further out, behinde the Rachleens, but when they come neere betwixt them, sheweth it selfe open by litle and litle. On both sides are the shores flat and cleane, so that men may ankor there where you will, either by the coast off the maine land of Ireland, in 8 or 9 fathom, or in the Bay under the lland in cleane sandy ground. Over against the Rachleens, close by the maine land, lieth another litle high Yland, called the Lambs or sheeps lland, to the southwardes off it betwixt it and the main, men may not sayle there about it, but betwixt it and the lland Rachleens it is broad enough.

Faire For-
land.

Lambes
lland.

From the Rachleens unto the Skires Portrush, the course is westsouthwest distant 7 leagues. About two leagues to the eastwards off it, in the maine land, lieth Porro Belletrie, a bad roade for great ships, the ground is there fowle & sharpe.

Betwixt Porro Belletrie and Skires Portrush, neereft unto Skires Portrush, lye the Chickens, these are suncken rockes, which may be sayled about on both sides, for to come to ankor under Skires Portrush.

Chickens:

The Skires Portrush is a rock lland, it hath on the southside a faire bay, where you may lye in fixe and seven fathom, cleane and sandy ground landlocked for all winds, except for the east-northeast winde, which beloweth alongst the shoare there open in. For to come under this Yland from the east, you must goe close alongst by the shore off the maine land, for to shun these foresaid suncken rockes the Chickens. It is there all over cleane and cleare: or els if you were minded to goe without, or to the southwardes off the Chickens, for to come under the Yland, you must shun the east point of the Yland, because of a suncken rocke that lyeth a litle off from the east point off the Yland. At the northwest side of this bay is also a small narrow channell, where you may saile through.

Skires:
Portrush:

A litle to the westwardes of Skires Portrush lyeth the Bant-haven, there alongst you may sayle up unto the new Towne Colran, it is a bad channell to come in, as well by reason of the strong freshunt that commeth out, as also because it is very shold: with shippes that draw eight foote water, you must have at least 3 quarters of the flood before you can goe in.

Bant-haven

The coast of Schotland.

The haven or sound of Loughrean or Lookreen in Scotland by the point of Galloway, lieth distant from Faire Forland the northeast point of Ireland, E. S. E. about 13 leagues, but the point called Cantir, lyeth distant from Lookreen N. W. and S. E. 9 leagues, there betwixt them both goeth up a great broad sound northeast in, called Dunbritain Firth, through which men sayle up unto Glaskow in Schotland.

Lough-
rean:

Dunbrit-
taine Firth

The sound of Lookreen you may saile in, and a good wayes you may turn into and againe for to ankor there within for westerly winde, if you doe come no neere the Gores on either side then in foure fathom, you can take no hurt: you may ankor somewhat in, by the second high point on the east shore in 10 or 12 fathom.

About seven leagues to the northwards of the point of Galloway in the foresaid great sound, lyeth a high sharpe Yland, cleane round about, off fashion almost like unto a poock or Hay, called Ailza, or Elzee, there you may boldly sayle round about it, it is there round about it, and close by it eighteen fathom deepe.

Elzee lland

From Elzee northwards fixe leagues lyeth also another litle Yland, close by the east side off the great Yland Arren, called Lamblash, or Lam-ile, cleane also round about, there you may saile round about it, and ankor under it for all windes in ten, twelve, or thirteen fathom, to wit, within it, betwixt the lland and the great Yland off Arren.

Lamme lland

North and by east and northnortheast two great leagues from Lamme-ile, lieth an Yland by the point off the maine land calleth Commer-ile, on the east side off it betwixt the Yland

Commer-
ile:
Bay of
Commer-
ile.

Iland and the maine land, you may sayle through in to a faire bay, where men are land-lockt for all winds, and from thence may saile forth unto Dunbrittain, or into the river Glaskow. The foresayd Iland Commer-Ile lyeth from the island, Elzee, about north and by east. For know ledge of this island, when men come off from Elze, or from the southwardes towards this island, men shal see a great castle on the E. side of the maine about a great league to the southwardes of Commer-Ile, and also a little castle, a good wayes to the northwardes, close upon the water side, that standeth right to the southwardes of the island Commer-Ile, or the sound that lieth there into the eastwardes of it, upon the same island standeth also a little castle close to the water side. Runne in betwixt the island and the maine land, about N. N. E. in, and leave the island a great cables length on the larboard side, and the main land on the starboard side you must shun more, because of a great ledge that lyeth of from it towards the island, and somewhat more northerly. Having Gotten cleare of the end of this ledge runne then right towards the maine land into the bay, or sound, & ankor there in ten fathom, right aginst a stone house with an orchard there by, it shall be then a stearne your ship about seven fathom deepe, and there morre your ship well.

To sayle from Commer-Ile to glaskow. For to sayle out of the Sound of Commer-Ile, towards Glaskow, goe first N. W. and by N. unto by the point of the island, that is, to the westwardes of you, and then north, alongft by it, then by little and little more easterley, a lenglht N. E. runne so all alongft by the easterland, without leaving of it, you shal not faile to come to the Sound of Glaskow. Coming by the point runne close about by it first eastnortheast, east, and by south, at least eastsoutheast; all alongft by the souther shore, you shal ten see a castle somewhat a head upon the fouthur land, close upon the water side, with two tuffes of trees upon the highland right eastsoutheast from the castle; keepe that foresayd castle betweene Tuffes of trees, and sayle in thereupon, so shall you run right, alongft the deepest off the Creeke, there is at high water five fathom, and at low water three fathom. From the north shore lieth off a great shold, which lyeth over the Sound more then two third parts from the north shore; towards the south shore it falleth dry at the lowest water, therefore men must shun the norther shore, and runne alongft by the fouthur shore. There standeth a white castle upon the south shore, right aginst that begin te foresayd sands. In the Creeke it is soft ground, but towards the sand the ground is hard, therefore when you fee by your lead that it is somewhat hard, that is a token that you come to neere te shoulds, saile then so forth upwards to Dunbrittain, there lyeth a little island on the fouth shore, which is it low water fast to the island, wen you shall be past it about two Cables length, then ankor there in five at high water.

A south & by west moone maketh there te highest water.

Of the Tydes and Courfes of the streames.

At Waterford an east and by north, and west and by south moon maketh high water.

Without the land in the fareway betwixt Silly an Ireland, a southwest and by west moone maketh high water.

In the channell or entrance of Washford, an east and west moone.

The flood runneth there to the northwardes, after high water a halfe tyde, and the ebbe contrariwise to the southwardes. a halfe tyde after low water, but not so strong as the flood.

On the east Coastes of Ireland to the southwardes off the bay of Dublin, a

southsoutheast and northnorthwest moone maketh high water?

At Dublin a southeast and north west moon.

The flood runneth from the Tuskar without the bankes alongft betwixt Ireland an Engeland northnortheast, and the ebbe four west.

On the Coasts a S. S. E. and N. N. W. moone maketh high water.

The flood commeth here from the southwardes, and also from the northwardes, about the north part off Ireland, an meere one another about right aginst Carlingford, where they stoppe one the other. The ebbe contrariwise falleth (to the northwardes off Carlingford) to the northwardes, and (to the southwardes of Carlingford) to the southwardes.

On the coast of Ireland from the Southrock and northrocke unto the Coplands Iles, a southsoutheast and northnorthwest moone maketh full sea. But to the northwardes of it a southeast moone.

On the island off the Ragleens and Skires Portrush an eastsoutheast and westnorthwest moone.

The flood commeth there out of the west, and falleth through betwixt Ireland and Scotland: from the cape Cantie to the mull of Galloway, southsoutheast, unto the island Man, there the floods out of the south and north doe meete one to the other. The ebbe contrariwise falleth alongft the coast northnorthwest betwixt Ireland and Scotland to the westwardes unto the Ocean sea.

At Englifoun in the Sound of Glaskow, a S. W. moone maketh full sea.

Courfes and Distances.

From Waterford to the Ilandes of the Saltees east, but to goe about to the southwardes off them east southeast, 3 leagues

From the fourth end off the Saltees to black-rock northeast and by east 2 leagues

From black-rock to Carnaroot northeast 1 league

But to Grenore 2 leagues

From the Saltees to the Tuskar east northeast, but from without the fowle ground to the southwardes of the Saltees northeast and northeast and by east 5 leagues

From black-rock to the Tuskar east northeast 2 leagues

From the Tuskar to Grenore northwest and by west, and westnorthwest 1 league

From Grenore into Grene-bay first northwest and by north, and then west-northwest 1 league

From Grene-bay to the Barre off Washford, N. & N. & by W. one great league

From the Barre of Washford unto Washford about one league and a halfe.

From Waterford to Grosholm east and by fourth 21 leagues

From the Tuskar to the rock Maicus east and by fourth 8 leagues

From Tuskar to the rocks Smaels southeast and by fourth about 10 leagues

From Tuskar to the land-end of England fourth an by east 40 leagues

From Waterford to the lands-end of England southsoutheast but to Silly fourth and by east, somewhat southerly, 40 leagues

From the poynt off Claskarrick to the poynt off Arkelo north and by east 4 great leagues

From Arkelo to Mizanhead north and by east, so newhat easterly 3 leagues

From Mizanhead to the poynt of Wicklo north and by east somewhat easterly 2 leagues

From Wicklohead to the flat poynt by Nicafile north, 3 leagues

From Nicafile to the poynt of Brae north, and north an by west one league and a third part.

From Wicklohead to braehead north, and north, an by west 5 leagues

From braehead to the island off Dalke north, and by west, 2 leagues

From Dalke to the barre off Dublin northnorthwest, two leagues and a halfe.

From the Sound of Dalke the poynt Houth northnortheast. two leagues and a halfe.

That course runneth without the poynt Houth, Irelands eye, Lambey, and Rock a bill.

The bankes lye from the Tuskar to the north-end northnortheast and southsouthwest.

From the barre off Dubling to Holy-hil in the island Anglesey east and by fourth 19 leagues

From the barre to the Town Dublin westsouthwest two leagues

From Lambey to Drodagh northwest and by north 5 leagues

From Lambey to Carlingford north an by west 13 leagues

From Carlingford to S. Johns poynt northeast, somewhat easterly 7 leagues

From S. Johns poynt to Strangford northeast and by north 4 leagues

From Lambey to the South-rocke northnortheast, 21 leagues

From the Northrock and Southrock unto the Coplands Iles N. N. W. 6 leagues

From the Coplands Iles to the north-poynt off Knockfergus northwest, somewhat northerly 3 or 4 leagues

One league to the northwardes lyeth the haven off Oldefier.

From Oldefier to the Ragleens with in the Maydes, through northnorth-west 6 or 7 leagues

Heights.

Waterford, or the Tower of waterford lyeth in 25 degr. or a little more;

How these Lands doe shew them selves at Sea.

Sleges Caraquin

The haven of Waterford.



The sheweth it selfe the land about waterford, and to the westwardes, with the high land of C. Quin. or Cara Quin, when you come towards the land.



Thus sheweth te Saltees, when they are 3 or 4 leagues west and by north from you.

Grenore.



Thus sheweth the land between the Saltees, and the poynt of Grenore is about 2 leagues from you.

Grenore.



The figure following is to bejoynd unto the former, the AA one the other.



The land to the northwardes of Grenore sheweth thus, when the northermost poynt, where the crosse standeth over, is north and by west about five leagues from you, and Grenore southwest and by west, so farre that a man may but even see it from below, and then a man may see the Tuskar from the top in the southwest.

E 2

Suger-

Sugerloafe.

Thus sheweth the coast of Ireland when that Sugerloafe is northwest, and the poynt of Brahead northwest and by north about seven leagues from you. When that Sugerloafe commeth northwest and by west from you, then may you runne so in, over the north grounds through a broad channell of nine an ten fathom deepe.



When the Sugerloafe is thwart from you, it sheweth with the high land within it, thus.

Sugerloafe

Brahead

Iland Dalke.



Thus sheweth the coast of Ireland betwixt the Sugerloafe and the iland Dalke, lying a the south poynt of the Bay of Dubling, when a man is about Brahead, one or two leagues from the land,

South poynt of Dubling.

Iland Dalke.

The poynt Houth,

Iland Lambey.



When a man commeth from the southwards, thus sheweth the bay of Dubling with the poynt Houth, and the Iland Lambey to the northwards of it.

The Iland Lambey sheweth it selfe thus, when it is from you northwest and by north one league off.

Thus sheweth the land a little to the southwards of Carlingford, when this high poynt is northwest from you about five leagues. He that will goe into Carlingford, must goe in close by the shore.

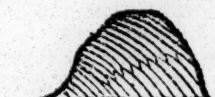
The land to the northwards of Carlingford sheweth it selfe thus, when the northermost poynt is north an by west from you 5 or 6 leagues.



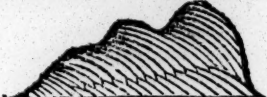
S. Johns poynt sheweth, thus when it is 4 leagues northwest from you.



Thus sheweth the poynt of Scotland over against the bay of Knockfergus, called the mull of Galloway, when men sayle alongst by it, a league without the land, and that the northermost and the low poynt is northeast from you, and the southermost southeast from you. Under the north poynt it is on both side good anchoring in 10 or 12 fathom, for southerly and easterly winde.



The iland Elzee in the great bay of Dunbrittain sheweth it selfe thus.



The iland Lamblash, or Lam Ile on the east side of the iland Arren sheweth it self thus, being 2 leag. off from it.



The iland Commer Ile lying before the sound of Dunbrittain, or Glaskow sheweth it selfe thus.



Thus sheweth the Cape Canayr, when it is from you northwest and by west about 7 or 8 leagues.



The man sheweth thus, when you are 4 leagues southeast from it.

The fifth demonstration,

In Wich the Coast off Vlyster and Munster from Bandharven to Mizanhead, are declinated.

Lough-foile.



WO leagues westnorthwest from Bant-haven, or west and by north from Skires Portrush, lieth the haven of Loughfoile, before it lieth a great plate of sand called the Touns, which lyeth from the west poynt of the haven a great wayes to the northwardes off from the shore, when the winde is out of the sea, it breaketh very much upon it, with small shippes that draw litle water, men may sayle into. Loughfoile haven at high water to the southwardes of the Touns, betwixt the Touns and the souther-poynt, called Magillions poynt, but it is there very uneven, and at full sea there cometh no more then eight foote water, but alongst the westwards off the Touns, it is very deepe, men may sound about the Touns on the off side in foure fathom.

Touns,

For to finde the Channell that lyeth into the westwards off the Touns, (comming from the east, or alongst by the Touns) you must looke out for a litle sandy Bay, that lyeth on the west-side, even within the north-poynt of the river under the high land, bring it so, that you may see it open of the foresayd north-poynt, and sayle in there upon, untill you come by the land, and then runne in alongst by it southwest untill you come right against Greencastle. If you come from the west or the north, you may boldly without feare runne alongst the shore, and about the poynt upon your lead, without comming neere the towne, you may see any thing that might doe you hurt, comming by Greencastle, there may

you ancor so that you may see Withcastle without the point of Green-castle, there you may lye within the Touns, sheltred for windes out of the sea.

For to sayle up from Green-castle, you must runne up alongst by the west shoare by your lead, and shunne the litle sandes that lye here and there alongst that side, untill you come past With-castle, right against the three trees, there is the ordinare road.

Betwixt Green-castle and With-castle neereft unto Greencastle goeth a Creeke or Slencke through the grounds, unto the easter shore, which is as deepe or deeper then the right fareway unto With-castle. When men come off from Greencastle, they must take good heed not to goe farre off from the wester shore, lest they fall into that Creeke.

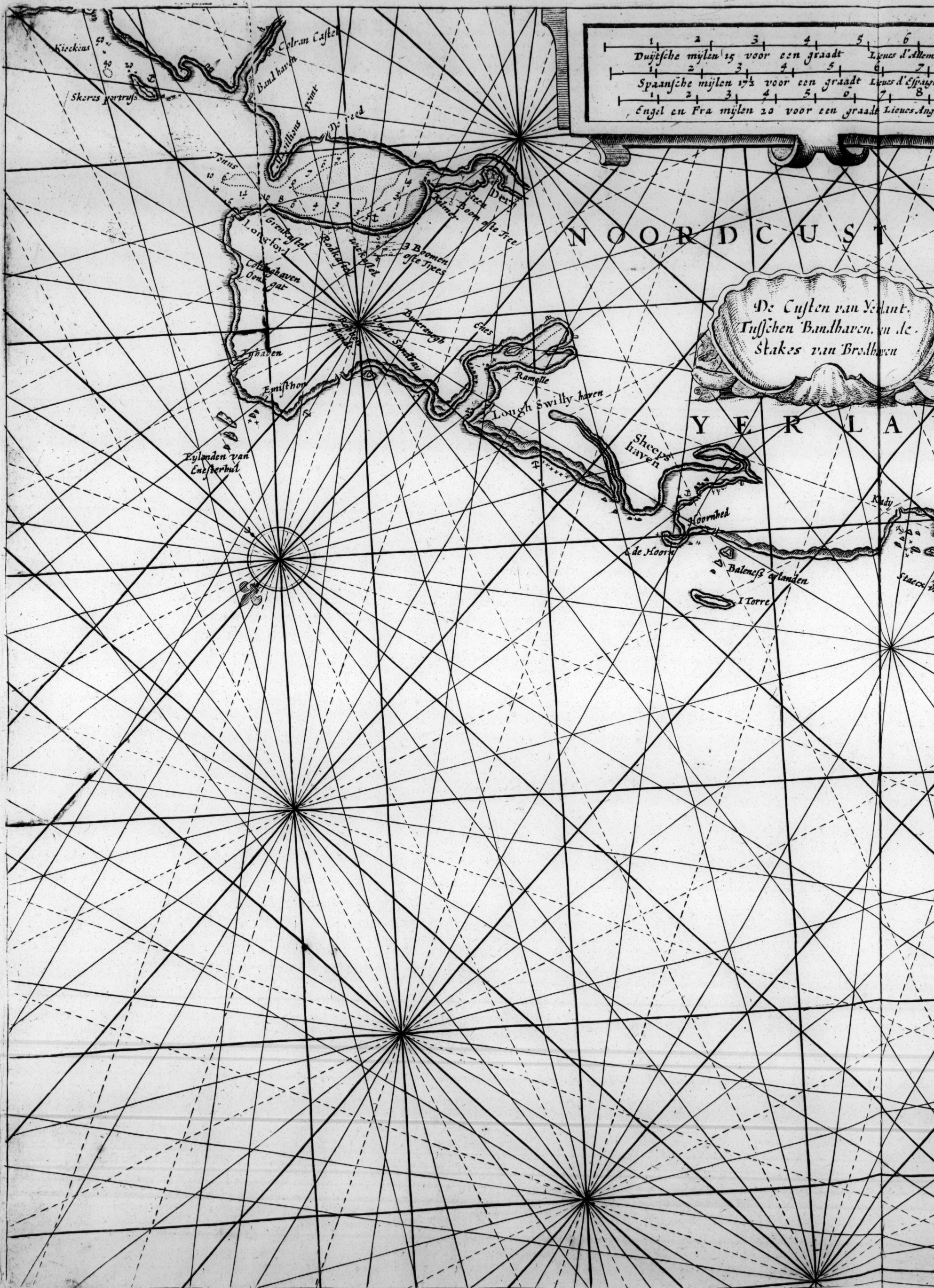
How men shal sayle from the foresayd roade forth up unto the Towne Derry, they may preceive or marke by the card.

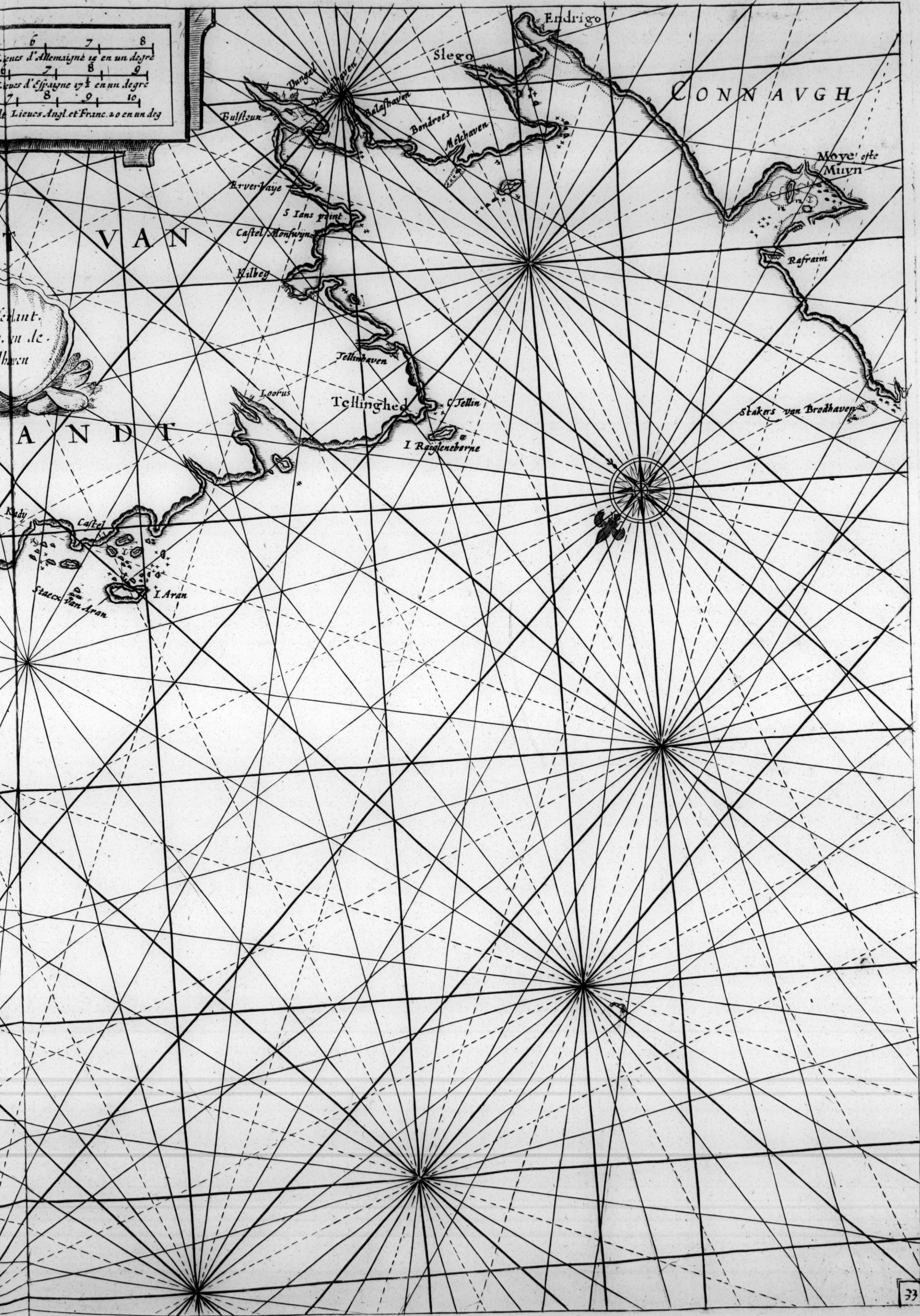
From Lough-foile-haven unto the ilands Enesterhul (by some called Monsterhul) the course is northwest foure or five leagues, these are small black ilands of rockes, not very high above water, and lye a litle of the northermost point of Ireland, called Eniston, a high plaine land, & very good to knowe for him that hath once seen it. Betwixt the ilands and the point men may saile through, but not without great danger for them that are not very well acquainted with it, because off much fowle ground and showlds that lye betwixt them both. Under the foresayd point Eniston, on the west side, men may ancor for easterly windes, or els to stoppe the tyde.

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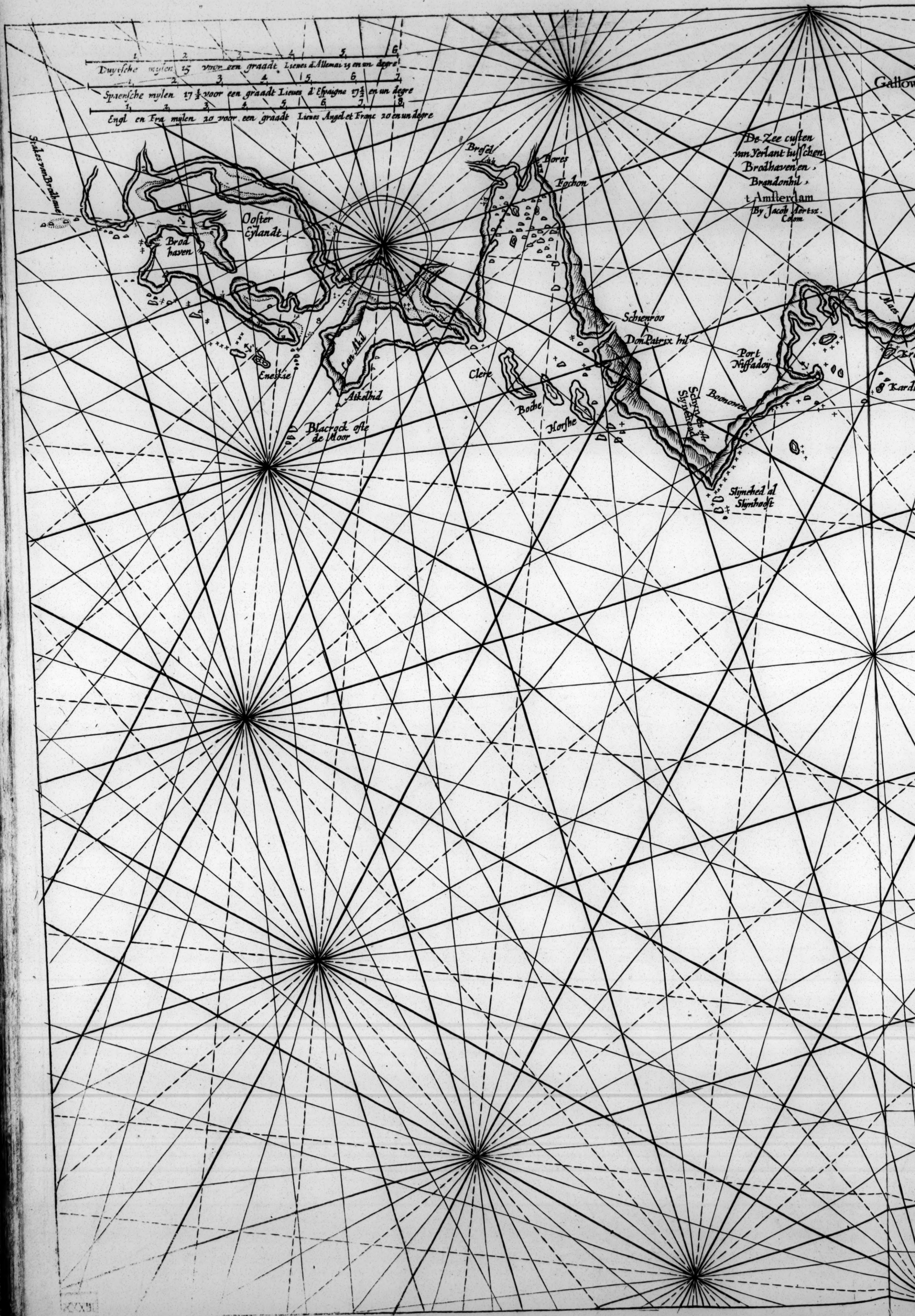
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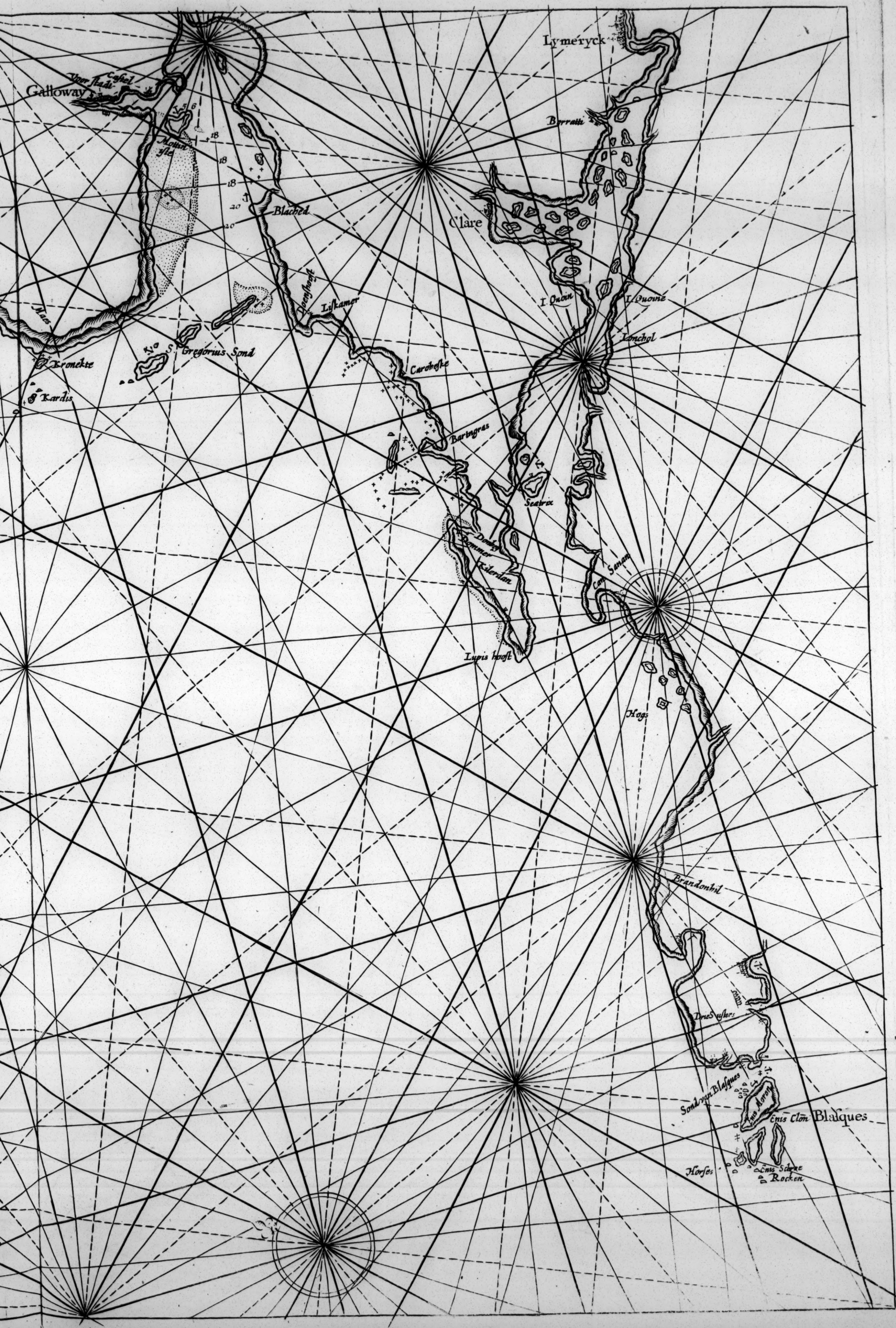


Duyfche mylen 15 voor een graadt. Lienes d'Allemar 15 en un degre
 Spaensche mylen 17 1/2 voor een graadt. Lienes d'Espaigne 17 1/2 en un degre
 Engl en Fra mylen 20 voor een graadt. Lienes Angel et Franc 20 en un degre



Gallow

De Zee custen
 van Verlant tusschen
 Brodhaven en
 Brandonhil
 t Amsterdam
 By Jacob Versteeg
 Colm



Loug
Swil

Horn
Cape
Horn

Tore
Ilanc
Iene
Ilanc
Aranc
Stag
Aranc

Cap
Telli
Telli
head

Kilb

Mar
fwy

Lough-Swilly.

From the islands Eneetherhul unto Lough-Swilly, of some called Lockfilie, the course is southwest 5 leagues, that is a faire haven. For to sayle in there, men must shunne the west side, and goe in alongst by the easter shore: The land about Lough-Swilly is the highest land of the whole north coast of Ireland, and thereby it is also very good to know, for those that (coming out off the north) do fall with the lands thereabouts.

Foure or five leagues westsouthwest, or somewhat westerly lyeth a large broad haven, called Sheephaven, but it is at some places fowle ground, within it men may lye landlockt for all winds. The west point lieth out, called Hornehead, or Cape de Horne, upon it is a hill with two hommockes; to see to like two hornes and there after the point is named.

Hornelead Cape de Horne.

At the west side of this point, men may ride and anckor within the rockes for easterly windes. Betwixt Lough-Swilly and sheeps haven lieth also a Bay, where men may ancker, but the ground is not very cleane, and right against it in the offing, halfe a league from the land, lyeth a ledge of rockes; which at high water are under, and at low water lye above water, men may (for need) goeth through betwixt it and the land, but without it is best and surest.

Westnorthwest about two leagues from Cape de Horne or Hornhead, lyeth the island Tore, to the southwards off it lye three Ilands, called the Ilands of Balenesse, men may sayle through to the southwards off Tore Iland, to wit, betwixt Ile-Tore, and the Ilands of Balenesse, and also within the rocks.

Tore Ile. Ilands of Balenesse. Ilands off Aran. Staggs off Aran.

From the Iland Tore to the Iles of Aran, the course is south-west and by south 6 or 7 leagues, betwixt them both, not far from the Iland Aran, lye some high rockes, called the Staggs or Aran. Alongst all that coast betwixt Horne-head and the Ilands of Aran, is good anckor ground all over.

For to come to anckor under the Ilands of Aran, comming out of the north, run alongst by that great Iland, leaving it on the starboard side, untill you be within it: goe then towards the southwest, and anckor on the southeast side, there is the roade. Men may also anckor in the Ilands over against it towards the maine, in divers places, and lye landlockt for all windes.

Upon the northwest point of Ireland, a good wayes landwards in lieth a high hill, of fashion almost like a Sugerloafe, which is seen in cleare weather before any other land, at least nine leagues at sea: When that hill lieth east and by south from you, and then sayle in right with it, you shall not misse to fall right with the great Iland Aran.

From the Iland Aran unto the point Tellinghead, called by the Irish cape de Telling, or Tellin, the course is S. S. W. 8 or nine leagues. Three or foure leagues to the northwards of C. de Telling lieth an Iland, called Raiglene borne.

Cape de Telling. Telling-head.

At the Cape Telling lieth a little Iland, halfe a league from land, men may saile through betwixt the Iland and the Cape, boldly without any danger.

To the southwards of C. de Telling, to wit, betwixt the Cape and the Stagges of Broadhaven, lyeth the land with a great baye, where in lye many goed havens, as Tilling-haven, Kilbegh, Dungall, Ballahaven, Slego, Endrigo and Moye.

Kilbegh.

From the Cape of Telling unto Kilbegh lieth the coast E. S. E. about foure leagues: betwixt both, about one league and a halfe from the cape, lieth Telling-haven, a round bay with good sandy ground, there may about 30 ships lye, west and south-west windes doe blow there open in, for all other windes men are there landlockt.

Kilbegh, or Calebegh is also a faire rund bay, but it is very narrow at the comming in of it: When men are a little from the shore, it seemeth to bee all close without any opening. About a halfe a league to the westwards of this bay, a quarter of a league from the land, lyeth a little Iland, which is very low and plaine, at both ends going plaine downe, that is a good mark to know this foresayd bay, men may also saile through betwixt the Iland and the maine, if they will. When you come out of the west, and are passed that Iland, then go neere the shore, which is cleane and cleare, and go freely close aboard of it, untill you shall see this bay open, and then sayle boldly in, without any feare, betwixt the two shores there is nothing (neither in the going in, neither within in the bay) that can hurt you, if you doe not sayle upon the shore. When you shall be come in, anckor where you please in five six, seven, or eight fathom, so shold or deepe as you wil, on the north side within the Bay stands a little Castle.

Marek-Swynsbay.

About a little league to the eastwards lyeth another Bay within some rockes, called Mackswynsbay, but it is not to goe in, except men be very wel acquainted, they must go betwixt the rockes in untill they bee gotten in, there they may save a ship without cable or anckor.

A great league to the southwards of Kilbegh, lyeth along

lying out point, called S. Johns point. Right west from that point, a quarter, or a little halfe league, lieth a great Rock under water, whereupon the sea breaketh with great noyse. Betwixt that rock, and the point of S. Johns point, men may sayle baldly through, it is there cleane and cleare.

S. Johns point.

About two great leagues to the eastwards of that foresaid point S. Johns point, lyeth the haven of Dungall, into the southwards. For to saile in there, you must first shun the easter shoare, which is very foule with dry plates and Rocks. When you are come right against a little castle that standeth on the north side, right against it lieth of a little riffe from the shoare that you must avoyd also. And when you are come about the point of that riffe, you must goe over again to the north side, for the south side is there flat and should. Betwixt Saint Johns point and Dungall haven alongst the coast is all over good anckor ground.

Dungall haven.

The haven of Moy hath at the comming in abroad bay, in it lye some rockes. For to sayle in there, you must leave them all on the west side, that is, on the starboard side, & run towards a little sandy Iland, that hath at the north end a little riffe, you must goe into the westwards of it, and leave that Iland on the larboard side. Even within that foresayd Iland lieth another little round green Iland, that must be left on the starboard side, so soon as you shall be right against it, you must let fall your anckor, for a little further it is shold & hard sandy ground, the greatest anckor must be brought towards that foresayd long small Iland, & the small anckor towards the litle greene Iland, it falleth there at low water alwayes dry. If you will goe from thence before the Towne Moy, you must light your ship to 8 foot, for to come through betwixt the long small Iland, and the S. grounds, there is at high water with an ordinary tyde no more then 9 foot water; being come over the neck, you shall come into a poole before the towne Moy, there you may ride a float at low water. In the road against the Iland it is 15 or 16 foot deep.

Moy.

The Stagges of Broad haven are Rockes that lye to the northwards a league or a league and a halfe at seaboard of the point, to the northwards of Broad-haven.

Staggs off broad-haven.

Broad-haven lieth in S. and by west, in the sound lye 3 or 4 rocks, these must be left on the larboard side, & run in there alongst to the westwards, untill you come within the haven.

A great league to the westwards of Broad-haven lieth an out point S. W. from the Staggs. From thence lieth the coast alongst to Black-rock S. S. W. Black-rock is a great high black rock with more other rocks by it, and lyeth from the foresaid point S. S. W. distant about 6 leagues, & about a league north-west from the out point Acklehead.

Blackrock

Acklehead is a very high point, and sheweth it selfe a farre off like an Iland with a great Saddle, thereby it is good to be knowne. Within this point lye also 2 exceeding high hills, which together with the point men shall see first at sea before any other part of the land, so that the point doth shewit selfe first like three Ilands. Men may sayle throught betwixt Acklehead and Black-rock, comming from the southwards men doe leave Acklehead on starboard, and black-rock (with the rocks thereby a seabord) on larboard, and the course lieth through betwixt them both northnortheast and north and by east unto the point of Broad-haven, it is there large and wide.

Acklehead

To the N. wards & to the E. wards of Acklehead, lie divers havens, where it is good riding, a litle to the N. wards of Acklehead, you may run into the w. wards, betwixt the low land to the N. wards on the larboard side, and the high land of Acklehead on the starboard side, a great wayes in, and anckor in 7 and 8 fathom, landlockt for all winds, and from thence may come out againe to the N. wards, or else may come out into the sea againe to the S. wards round about the land of Acklehead.

From Acklehead to Sleythead (by the seafaring men called twelve-pence, because the land doth shew it selfe in 12, round hommockes) the course is south and by east 10 leagues, betwixt them both lye three Ilands before a great bay, the northermost or next to Acklehead is called Cleere, this hath a high hill on the N. end that is very steepe, & at the south end it is flat going downe. The second or middlemost is called Boche, within it is a road for those that are bound to the S. wards, where men may anckor in foure fathom: The southermost is called the Horse.

Sleythead twelve-pence.

Betwixt Acklehead and Twelve-pence lyeth within in the land, a very high hill like a Sugerloafe, called S. Patricks-hill, or by some Don Patrix, that may be seen far at sea and shall be seene long, altering it selfe by the cliffe land, as men saile long the coast to the northwards, or to the southwards:

patricks-hill.

From Sleythead, or twelvepence unto the sound of S. Gregories, before the bay of Galloway, the course is S. E. 9 leagues.

Before the bay of Galloway lye 3 great Ilands, called the

E 3

Ilands

Ilands of Aron, the northernmost is greatest, the channell betwixt the northernmost and the middlemost, is called the sound of S. Gregory, which is on both sides cleane without any foule ground, so that men may turne in to and againe from the one island to the other, without feare of taking any hurt. The N. side of the middlemost islands is nothing else but faire steep rocks: when you are come within the islands, you must shun the middlemost, because of a litle riffe that lieth of it.

Men may also saile to the northwards of the northernmost island, into the great bay of Galloway, likewise also to the southwards of the southernmost, to wit, through betwixt the southernmost island, & the maine land, but that island is foule at the fourth end of it, & therefore you must run in alongst close by the fourth shoare, or at least leave two third parts of the channell towards the island, as well in sailing in as sailing out.

Somewhat within the islands, on the south side lieth a high black point, called blackhead, you must beare into it, & alongst by it in, whether you come in at the souther channel, or through S. Grigories found, or else in at the norther channell, for the north side of the bay is foule and rocky. About 2 great leagues N.E. from Black-head, lieth an island, called Motton-ile, under it on the E. side you must anchor in a poole, in 5 or 6 fathom.

You cannot saile further up to the northwards into the River with shippes, but onely with boats. A northeast and S. W. moone maketh there full sea, and it floweth there so strong in the baye, that the rockes which at low water are above water, at high water you may saile over them; at low water the spring tydes, the grounds fall dry W. S. W. from Motton-ile, a great league and halfe of, most all rocky and foule ground.

When you saile from Blackhead towards Motton-land you must take heed of the north-side, and edge over most towards the south side. About halfe wayes betwixt them both, lieth a plate or ledge nearest the north side, you must goe in alongst by it to the southwards.

Lupishead From the Bay of Galloway to Lupishead, the north point of the haven of Limbrick, the course is southsouthwest nine or 10 leagues. About halfe wayes betwixt them both, lieth a litle island that is foule round about with ledges of rocks that lye of to seawards a league and a halfe a seaboard the land.

Haven off Limbrick Seatruck. To the southwards of the point Lupishead goeth in the haven of Limbrick. Three or foure leagues eastnortheast within the fore said point, lieth an island, called Seatruck, you must saile alongst without in to the southwards, & leave it on the larboard side in sailing up. At the east side of that island is a good road. About halfe wayes betwixt that island and Lupishead, lieth a howld which you must shun, & saile alongst to the southwards of it. From the island Seatruck unto Limbrick, are more 12 or 13 leagues, first from thence to the island Quoine 4 or 5 leagues there are two litle islands, you must saile close alongst to the northwards of them: from thence E. N. E. unto a great rock, called the great Beefe, and then southeast unto another great rock, called the little Beefe.

The great and little Beefrocks When you are come before the towne in the Haven, you

must make fast on the Castle with three or foure Cables, for there goeth a very strong tyde as well of flood as of ebbe. An eastnortheast Moone maketh there full sea.

From the haven of Limrick to the haven of Smerrick the course is southwest seven or eight leagues, betwixt them both lieth the coast with a great Bay, wherein lie some litle islands, called the Hoggs.

A litle to the eastwards of Smerrick lieth Sinbrandonhil, a very high hill, which lieth in height very much above all other lands thereabouts, they that come out of the sea from the westwards, shall see that hill first before any other land, and thereby easily know it: Men may see at sea in the offing, 12, 14, and sometimes 16 leagues of, according as the weather is cleare.

Foure leagues westsouthwest from Smerrick, a litle of from the land lye 4, or 5, islands, being high round Hills and rocks, called the Blackeys, with some other rocks and litle islands about them. The Sound betwixt them and the maine land, is called the Sound of Blaskeys, lieth through nearest N. W. and S. E. Hee that is bound to the northwards, may anchor at the south side before the sound for westerly and northerly winds, and not be in-bayed upon no lee shoare: For of the winde shift easterly, hee may either goe through the sound, or else goe about a Seaboard the Blaskeys. If the wind shift westerly or southerly, he may run through the Sound, and further his voyage. There runneth through a very strong tyde, as well of the flood as of the ebbe which must be considered.

Of the tydes and courses of the streames.

In the haven of Loughfoyle an east and by S. and west and by north Moone maketh full sea. The flood commeth there out of the west and northwest.

At the Islands Enesterhull, and in Sheepshaven an east and west Moone maketh full sea. The flood commeth there out of the west.

In these other foresaid Havens and roads an eastnortheast and W. S. W. moone maketh full sea. In the offing a seaboard a southwest and N. E. Moone.

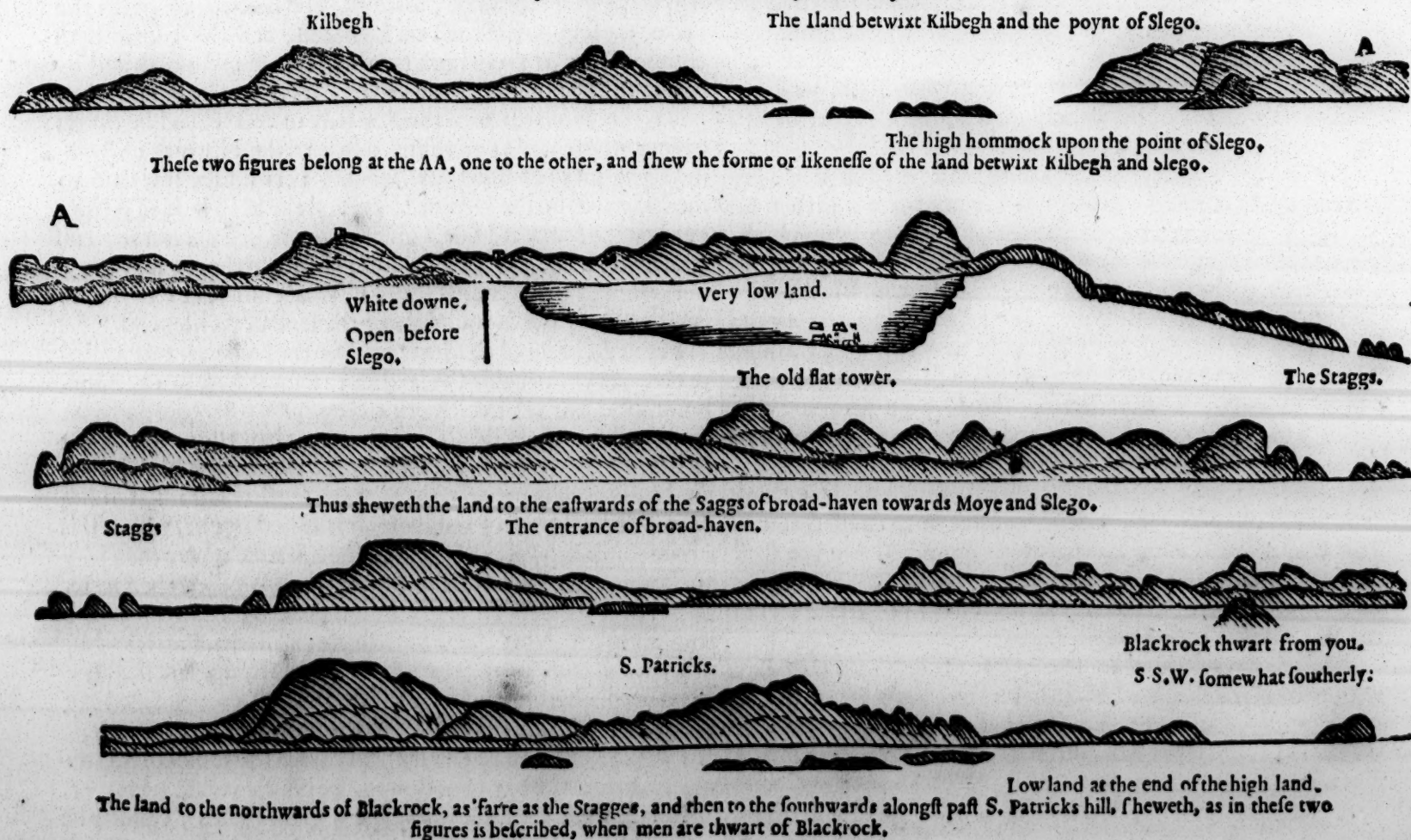
Courses and Distances.

From Loughfoyle to the Islands Enesterhull northwest	4 or 5 leagues
From Enesterhull to Lough Swilly southwest	5 leagues
From Lough Swilly to Sheepshaven westsouthwest westerly	4 or 5 leagues
From C. de Horne, or Hornhead, to the Island Tore westnorthwest	2 leagues
From the Island Tore to the Isles of Aran southwest and by south	6 or 7 leagues
From the Islands of Aran unto Tellinghead S. S. W.	8 or 9 leagues
From C. de Tellin or Tellinghead to Kilbegh eastsoutheast	4 leagues
From cape de Tellin to the Stagges of broadhaven southwest	11 leagues
From the point of broadhaven to Blackrock southsouthwest	6 leagues
From Black-rock to Acklehead southeast	1 league
From Acklehead to Sleynehead south and by east	10 leagues
From Blackrock to Rokoll north and by west	60 leagues
From Sleynehead unto the bay of Galloway, southeast	9 leagues
From the bay of Galloway of Lupishead the N. point of Limbrick haven i. f. west	9 or 10 leagues
From Lupishead to Smerrick south west	7 or 8 leagues
From Smerrick to the blaskeys westsouthwest	4 leagues
From Sleynehead to Sinbrandonhill south and by west	22 leagues
From the bay of Galloway to the blaskeys, S. W. and by S.	23 leagues

Heights.

The Islands of Enesterhull at the northernmost point of Ireland lyeth in 55 degrees and 10 or 12 minutes	
The River of Galloway lyeth in	53 degrees 10 min.

How these Lands doe shew them selves at sea.



The land to the northwards of Blackrock, as farre as the Stagges, and then to the southwards alongst past S. Patricks hill, sheweth, as in these two figures is described, when men are thwart of Blackrock.



Thus sheweth the land betwixt blackrock and Ackelhead, when it is east from you, when you come more to the northwards, these high hills doe alter also wider one out of the other.



The point of Blackrock sheweth thus, when you are to the northwards of it.



Thus sheweth the point of Blackrock, when men are to the southwards of it, then they see a sharpe rocke over the point.
Don Patrick or Patrickshill.



Thus sheweth S. Patricks hill, when it is S.E. and by S. from you, being not farre from land, at the N. side of it lye some little Ilands and rocks.
S. Patrick hill.



S. Patricks-hill.



Blackrock.

Thus sheweth the second point the northwards of Blackrock, lying in the height of 54 degrees and a halfe. The Ilands, as also the maine land by north and by south the bay of Galloway, shew as you may see in these 5 following Figures, when as you are right before the Ilands of Aron, which lye before the Bay of Galloway.



North being 8 leagues from you

N. N. E. 10 leagues.

These 4 following figures belong one to the other, as the markes doe shew.



N.N.W. 6 leagues the maine land by N. Galloway.

N. 3 leagues
Betwixt these two Ilands, it is 20 fathom deepe.

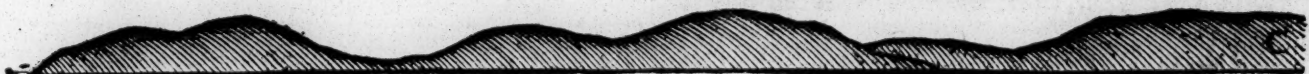


B

The 3 Ilands of Aron before Galloway.

E. and E. and by north 4 leagues.

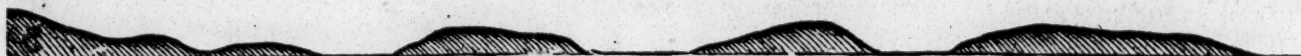
E. and E.S.E.



S.E. and by S. 7 leagues.

S.S.E. 8 leagues

S. and by E. 9 leagues.



N.N.E. 4 leagues

This belongeth to the 3 figures, going before the AA, BB, CC, one to the other:

East 5 leagues

E.N.E. 6 leagues

being 8 leagues N.E. and by E. from you?



Thus sheweth the land on the Ilands between the Lemrick and Galloway, when as you come out of the sea.
Being northeast and by north 4 leagues from you

Northeast 4 leagues

Northeast and by east 4 leagues?

When as the middelt of the Ilands of Aron (which lye before Galloway) is northeast 4 Dutch leagues from you, it sheweth it selfe thus: and that C. Kerry, or Sinbrandonhill, southerly little Iland sheweth then low and flat.



Blaskeys.

The land of C. Kerry, or Sinbrandonhill (by some called Devels hill) unto the blaskeys, lying N. E. and by E. 5 or 6 leagues sheweth, as is pictured out in these two figures, when the forefaid hill of Sinbrandon is E. S. E. from you three or foure leagues.

Ilands to the northwards of the blaskeys

A Channell

Sound of blaskeys.



Blasques.



Elasques.

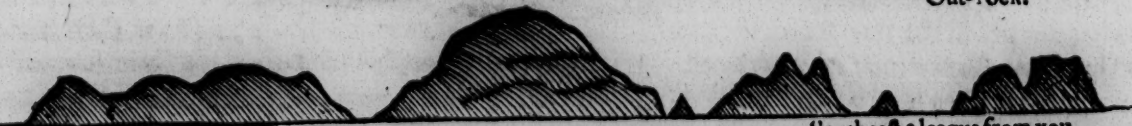


The Blaskeys.



S.S.E. being 3 leagues and a halfe from you.
The blasques being S. E. and by S. 3 leagues from you, sheweth thus.

Out-rock.



Southeast 3 leagues from you.
The highest rock of the Blasques, being two leagues east and by south from you, sheweth thus.

The

The sixth demonstration,

Where in the coastes of Munster, betweene Blasques and Oldhead, and the south coast of Ireland, from Oldhead to Waterford, are set forth.

Skellocks. Even or eight leagues to the southwards of the Blaskeyes lye three great Rockes called the Skellocks, the eastermost about a league, and the westermost two great leagues a seaboard the land, when you come from the southwards and see them first, they shew like sayles of ships. Betwixt the Skellocks and the Blaskeyes goeth in a great broad bay deepe into the land, called Dinglebay, with divers havens in it.

Dinglebay About a league and a half from the Sound of Blaskeys lieth a haven called Ventrie, a great league to the eastwardes off it another called Dingle, or Dingle Couch, it lyeth north and by west in at the west point of it lyeth a rocke, called the Crow, which is clean round about, so that men may saile round about it on both sides, within taking any hurt, at high water with spring tyde, it floweth even under water. This haven of Dingle and the Skellocks, lye northeast and by north, and southwest and by south distant eight leagues.

Begenny-haven. Northeast from the Skellocks, southeast from the Sound of Blaskeys, and south and by east from the Ventrie, lyeth a haven at the east end of the Island Valentia, called Begenny, which lieth eastsoutheast in, you must give the east point off the Islands a Birth off, because it is fowle, and lieth a good wayes off: there lyeth also a suncken rock on the Yland side, which you must take heed of when you are come within the entrey of the haven, you must goe east and by north unto the road, which is right against a red cliffe that lyeth on the south side.

The Skellocks and the Cape Dorsey lye northwest and southeast, seven or eight leagues a sunder, betwixt them both goeth in also a great broad Sounds, northeast, wherein lye many Islands, haven and roads.

C. Dorsey C. Dorsey is an Island within which men sayle and ryde under. For to goe in there from the southwardes, you must, give the east side a birth, that is, the side of the maine land which is fowle, and run in alongst by the side of the Island, untill you be come within, anckor there.

Bull Cow and Calfe rockes. Without the Cape Dorsey lye three great rocks, the outermost or the westermost is called the Bull, the middlemost is called the Cow, and the other the Calfe, they are clean round about, so that men may sayl there through between them, without feare of any danger, there is nothing that can hurt but men may see it.

Mizan-head. About seven leagues eastsoutheast from C. Dorsey lieth the point Mizanhead, betwixt them both goeth in a great Bay or river deepe into the land (with divers havens and roades) called the Bantry.

Thre castles. A great league to the northwardes of Mizanhead, lyeth a poynt, called the three Castlehead, upon it standeth three flat Towers, but men can hardly see them Except they be neere the land. Also a great league more to the northwardes, lieth a small point, called Steephead, Betwixt these two points goeth in a great broad Bay, called Dounams Bay, there is nothing to doe nor to fetch, but it is a fit place to save ships, and all over good anckor ground.

Beerhaven From Sheephead to Beerhaven, the course is north and by west, or somewhat wersterly about two great leagues, it goeth in between an Island on the east side, and the main land towards C. Dorsey on the west side, it is about a great musket shot broad, the foresayd Island on the east side is called the Yland of Beer-haven and is about two leagues long. For to sayl in there you must keep the mid way, in the entry of the haven it is clean, without any fowle ground: after you be come in, there standeth on the larboard side a ruined castle, and a little further are two litle rivers, close one by the other, between these two litle rivers stand some Fisherhouses. Men may sayle into the foresayd litle rivers, they are deepe enough, but commonly men doe anckor before them, or by that foresayd ruined castle, or els somewhat further in, it is all over good anckoring, and cleane ground, except right against the foresayd litle rivers, lye some rocks about the middle of the channell, which at high water are under, and at low water lye above water, these onely must be shunned, but men may goe on either side off them. Somewhat further in the Bay standeth another castle, called Oldcastle, from thence men may sayle alongst to the northwardes off the Island Beer haven, and come tou to

the eastwardes into Bantry. The Sound on the north side off the Island is large, broad and cleane, 13, 12, and tenne fathom deepe. The east poynt of the Yland is a sharpe point, and very fowle, there lyeth of a ledge of rocks, where off some lye under water, and some above water at low water, but the side off the mayne is cleare and cleane. In this entry lye also two great rockes high above water, but clean round about, men may run through between these rocks, or to the southwardes, betwixt them and the foresaid ledge of rockes, or also to the northwardes alongst betwixt them and the mayne land, as well in comming in as in sayling out, there is no danger more then men may see.

From Beerhaven to the north point of the Island Whiddy, the Whid lieth the Bantry eastnortheast and northeast and by east 6 or 7 leagues: over against Beer-haven in the midst in the fare-way, it is deepe 40, 36, and 30 fathom, within the Island, 15 and 16 fathom, but further in towards the Island Whiddy, it is againe 20 and 25 fathom deepe: men may sayle round about the Island Whiddy, (which is about a league long) but to the northwardes it is best.

For to sayle in about to the northwardes, or to the eastwardes, men may goe in close by the north or east point, but a litle within the point, lyeth a litle ledge of rockes, a litle musket shot off from the shore, which at high water lyes under, but a halfe ebbe beginneth to come above water, that onely is there to be shunned, being passed that, you may anckor all over. About that foresayd point lye two small islands, by the greater men may sayle alongst on both sides of it, either within it or without it, untill before a Gentlemans house which is white, upon the island Whiddy, and anckor there against it in 3 or 4 or 5 fathom, so deepe or so should as men will, according as men desire to ride neere or far from the shore, it is there all over clean ground.

He that will sayle into the south point of the Whiddy, had need be very well acquainted it is there to the southwardes betweene the Whiddy and the maine land, at most placed fowle and stony. From the west side of the Whiddy, lye also some fowle ground and rocks, somewhat off the island to seawards, some above, and some under water.

To the southwardes of the Whiddy upon the maine Land, standeth a Friery or Abbey, called by the Irish the Abbey, right against it is the common road, & it is very good ground in 4, 5 or 6 fathom, according as you shall ride farre or neere to the shore, to the N. wardes lyeth a litle island so low in the midst, that at a spring tide the sea floweth over, & divideth it in two.

A litle league to the eastwardes of the Abbey lyeth a litle rowne upon a litle river called Balgobben, at high water men may goe up ther with ther boat, but at low water it falleth dry.

A great league from the east poynt of the Whiddy, west-northwest, lyeth a haven called Longerf, when you shall sayle from the foresayd point towards it, you shall meete right in the fareway, about halfe wayes over a great rocke, which men may be sayled about on both sides, but it is best on the off-side. The off-side is cleane and cleare, but on the inner-side lyeth some fowle ground. He that will sayle through on the inner-side, had need to be very well acquainted. The foresayd haven of Lang-erf lyeth N. N. W. Even within it in the entrance on the starboard side, lyeth some fowle ground, which at low water (the Spring tydes) may be seen drye, these must be shunned, or els it is there within all over good anckoring & good ground, there is no more danger, but men may see it.

When a man is neer the Island Whiddy, about midst of the Bay, he cannot see the land without the island Beer-haven on the west side of the Bay, because it falleth a way so alongst to the westwardes.

From Mizanhead unto C. Cleare, the course is east and by south distant seven leagues. About three leagues within or to the eastwardes of Mizanhead, Northwest from C. Cleare, lyeth a haven called Croock-haven. He that commeth from the east, and is bound in there, must runne alongst by C. Cleare, up about it to the northwardes, so farre untill hee may see through into sea to the northwardes of the island off C. Cleare, as through a hole, and set then his course west-northwest, keeping that foresayd hole (to the northwardes off C. Cleare) open, then hee shall fall right with Crooks haven,

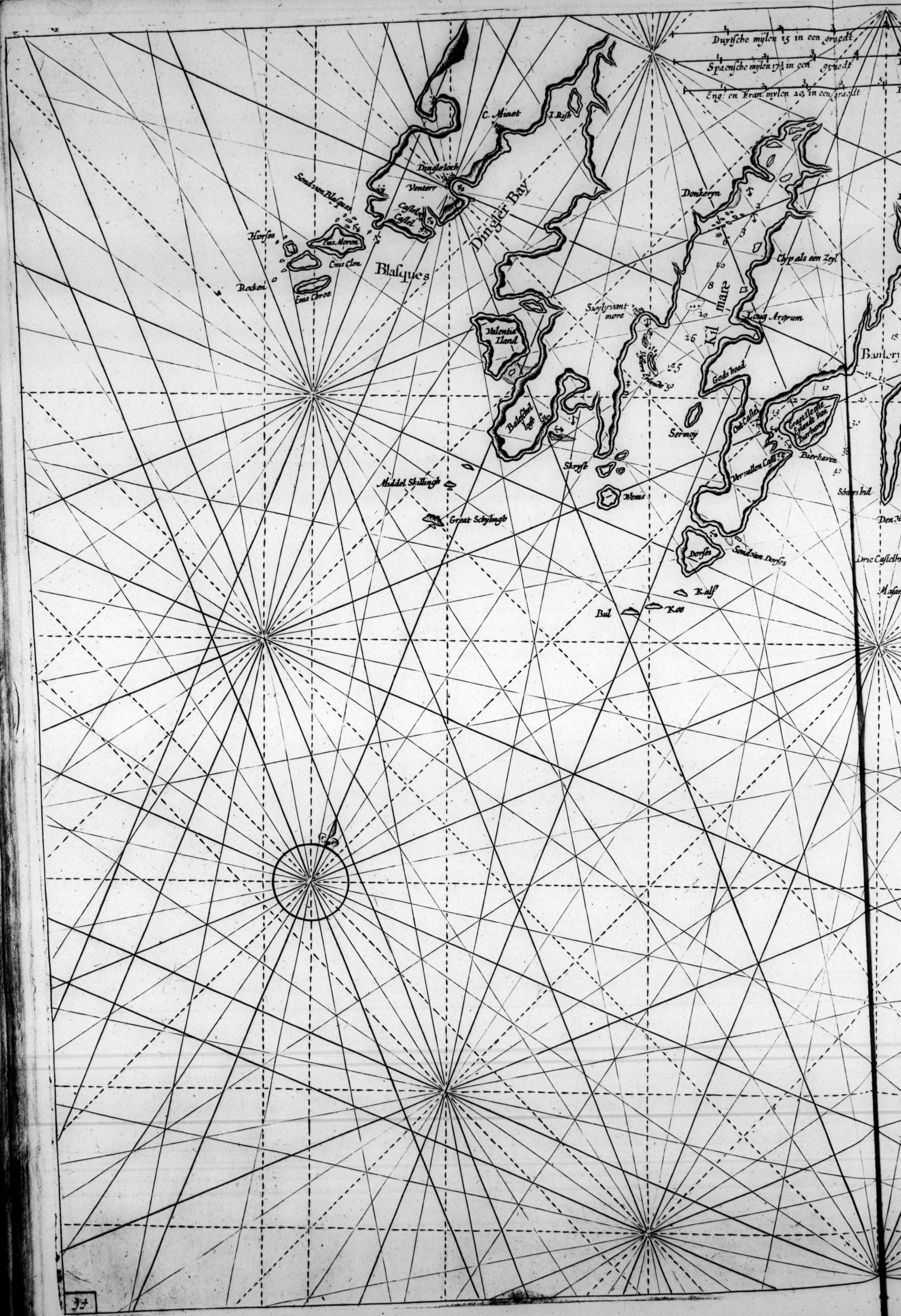
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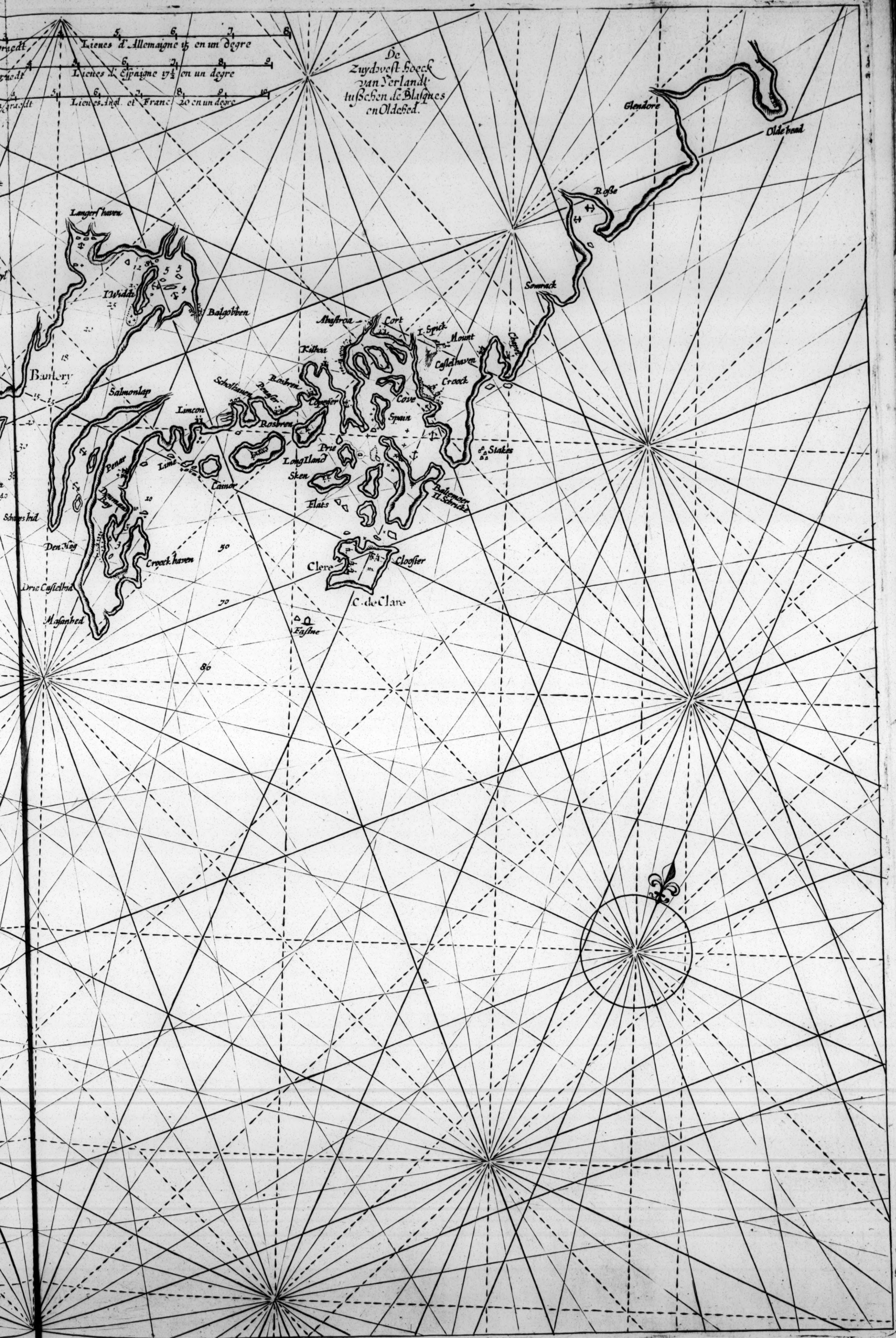
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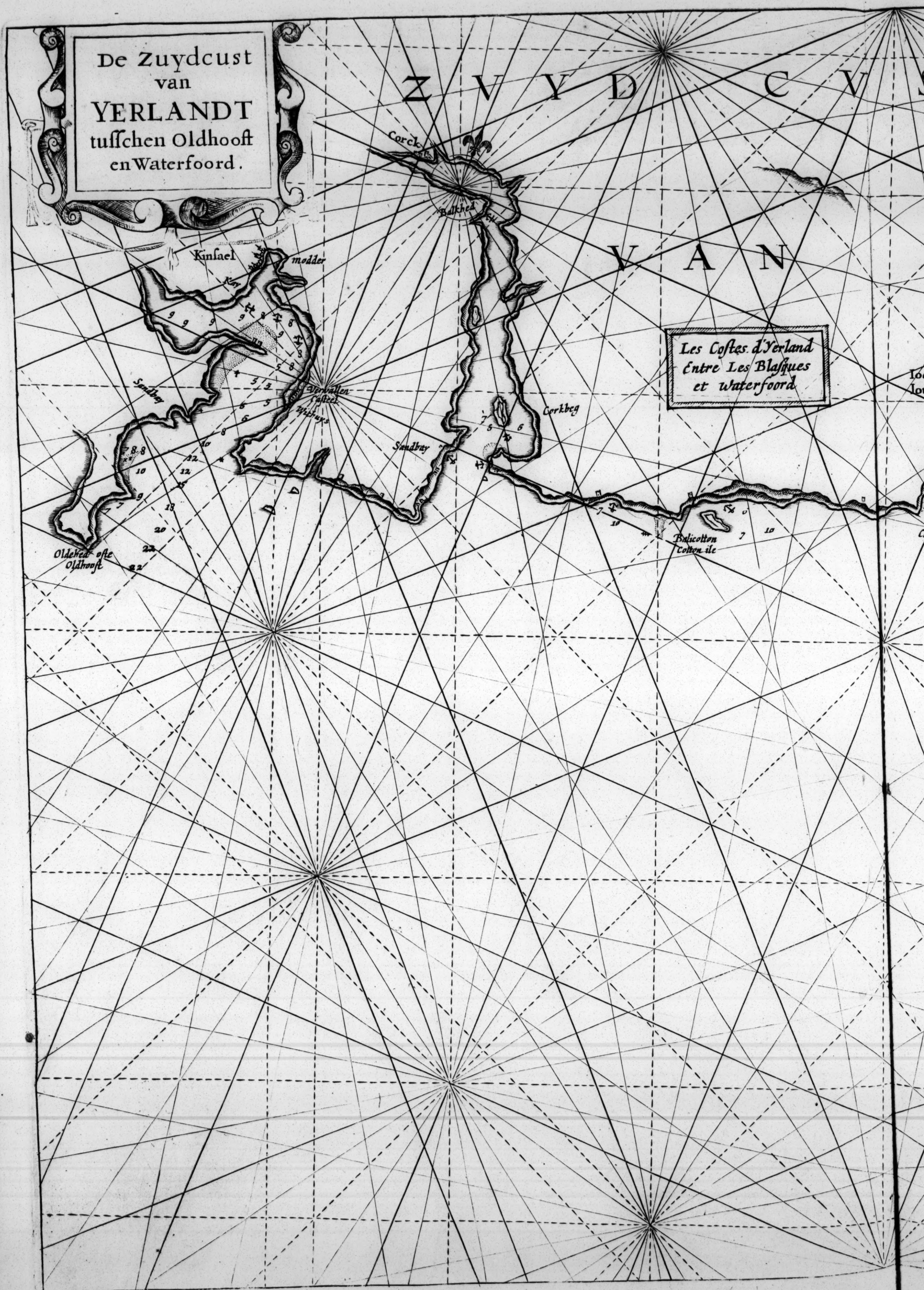
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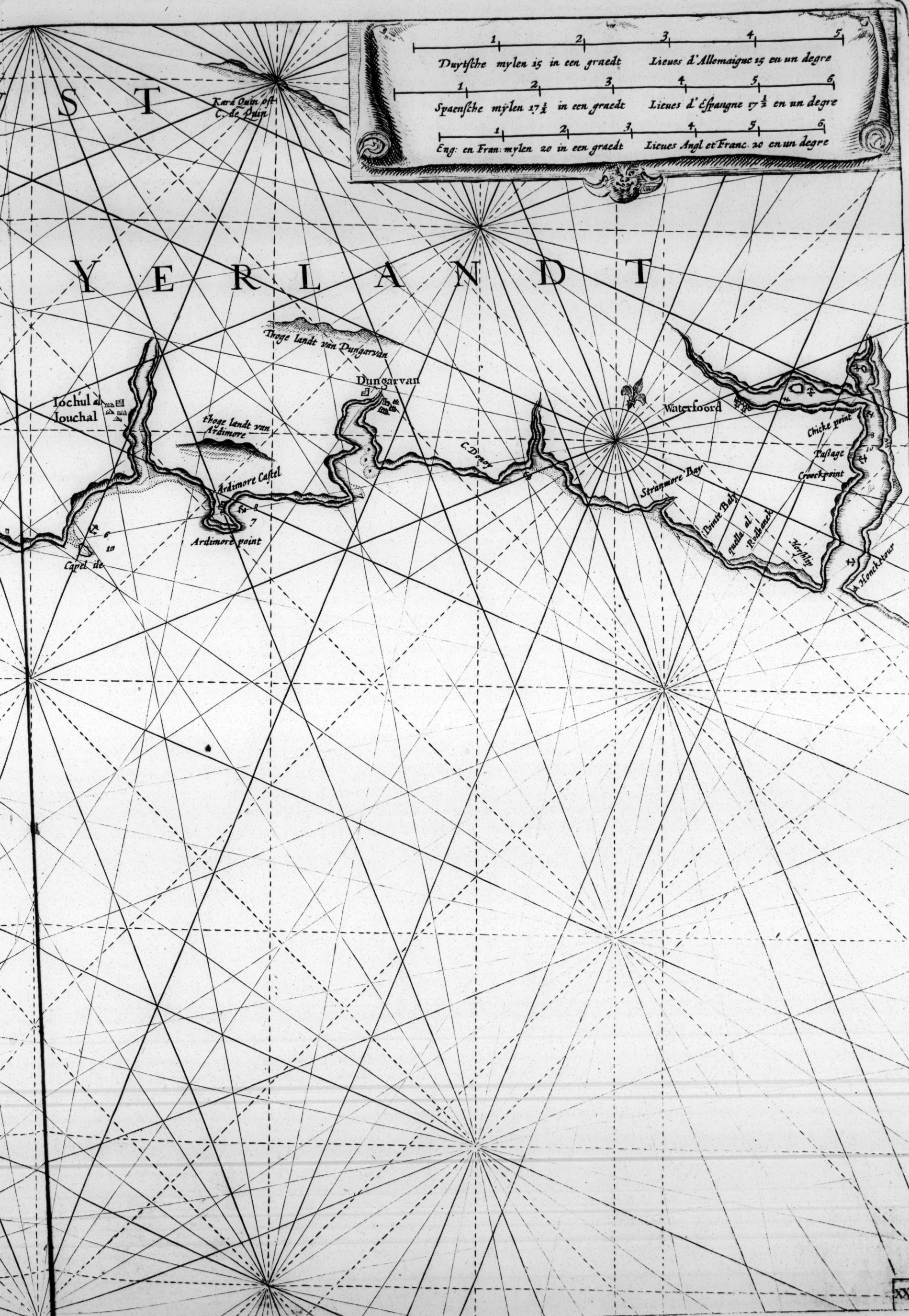




De Zuydcust
van
YERLANDT
tusschen Oldhooft
en Waterfoord.



Les Costes d'Ierland
Entre Les Blasques
et waterfoord



1 2 3 4 5
Duytſche mylen 15 in een graedt Lieues d'Allemaigne 15 en un degre
1 2 3 4 5 6
Spaenſche mylen 17½ in een graedt Lieues d'Eſpagne 17½ en un degre
1 2 3 4 5 6
Eng. en Fran. mylen 20 in een graedt Lieues Angl et Franc. 20 en un degre

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haven which lieth in westfourthwest. And there he may anchor before the litle town in three fathom, and two fathom and a halfe. It was wont heretofore to be deeper there, but it is spoiled most by casting of ballast, men may also anchor further out then before the towne, there it is deeper, and all over cleane ground.

Faltney-rock. Two litle leagues west and by south from C. Cleare, lieth a high steepe rock alone in the sea, called Faltney, which sheweth at first sight like unto a sayle, north and by west 3, or 4 leagues, from this rock lieth a haven called Schoolhaven.

Schoolhaven. A litle to the eastwardes off the lland off Cape Cleare lieth another lland, called Ile Sherck. To the eastwardes off it, betwixt that lland & the maine land goeth in a haven called Baltemoore haven: It is somewhat narrow at the mouth of the haven, but within the mouth off the haven it is large and broad, there may you anchor on both sides wheare you will, and lye landlockt for all windes. On the west side within the haven standeth a Friery, close before it you may anchor in five and fixe fathom; in the middest off the haven, it is fixe and seven fathom deepe. A litle to the northwards of the foresayd Friery standeth a castle upon a point. In the mouth of the haven lieth a suncken rock, neere to the east side; and within in the middest of the haven lieth a rocke, which at high water lieth under, and at low water lieth above water, there is nothings els that can hurt. A litle to the eastwardes without the haven, lieth another rock 6 or 7 shippes lengths from the shore.

For to saile through within the llands off C. Cleare. To the northwardes of the lland of the Ile Sherke, men may goe to the westwardes through betwixt Ile Sherke, and the lland Spain, and come out againe into sea by C. Cleare, but it is to bee done onely with small shipping, and yet not without danger. Betwixt Ile Sherke and Spain, is at halfe flood not more then twelve or thirteene foote water. At divers other places betwixt these llands, it is rocky and shold, so that it is not good to goe through within, except men be very well acquainted, and yet at high water and spring tydes.

Staggis: A litle league to the eastwardes of Baltemoore lye the Stagges, an English mile from the shore, they are five or fixe high steepe rocks. When men come from the eastwardes alongst by the shore, and get first sight of them, they are like unto some spirie towers together, men may saile through betwixt them and the maine land, it is there large and broad enough.

Castle-haven. Northeast about two leagues from the foresayd Stagges, lieth Castle-haven without it on the east side lieth a litle lland, you must leave it on starboard side in sayling in, and another litle flat lland on the starboard side, that lieth so close to the land, that at low water men may goe dry foot over from it to the maine land. Within the haven standeth a litle Chappell, when you will sayle in there, you must runne in right with it, close alongst by the foresaid litle lland on the east side: when you are come in, thwart of the Chappell, you shall see a Castle on the west side, over against that Castle you may anchor in 12 fathom.

From Castle-haven unto the Oldhead, the coast lieth most E. N. E. and W. S. west, but C. Cleare ant the Oldhead lye N. E. and by east, and S. W. and by west distant 13 or 14 leag.

Kendonedo. About halfe wayes betwixt Castle-haven and the Oldhead lieth a high point, called by the Irish, Kendonedo, there by it on the west side is a good haven, called Clandore: For too sayle in there, you must run in alongst close aboard by that foresaid high land on the east side, for too shun a rane of rocks that lieth on the west side, and lieth off somewhat towards on the east side, when you are come in, you may anchor before a Castle in five, or seven fathom.

The Oldhead or C. de Velho, is a point that lieth out farre without the other land, the outermost south end of it is very high & steepe, when you are come alongst the shore from the east or from the west, and see it first, it seemeth to bee an lland, upon the top off it standeth a ruined castle with three Towers, whereof the middlemost is the highest. On both sides off this outlying poynt men may anchor so deepe or shold as they wil.

Kinsale. About two leagues north and by east from that point, lieth the haven of Kinsale, lying in northnortheast, you may saile in there, keeping the middle off the channell, there is no danger, neither without not in the harbours mouth, but one suncken rock close by the east poynt. When you come in from the Oldhead, or from the southwardes, and you keep an old ruined castle (that standeth within the haven on the east side) even without the innermost east point off the haven, then you shall not come neere the rocke to take any hurt off it. About a great halfe league to the eastwardes or the havens mouth, lye two great black rockes, the one somewhat further from the shore then the other. When you come from the eastwardes, and you will goe in close about the east point, and you keepe the fou-

thermost (that is the greatest) right on the east poynt, then you shall goe through betwixt the suncken rock and the point: but if you keepe the northermost (or the smallest) a litle without the foresaid point, so long untill you have brought the foresayd old ruined Castle, without the innermost point, then you shall goe alongst without it, and then in the midst of the channell alongst by the easter shore. A litle past that foresaid old ruined Castle, standeth a Castle on the west side upon a poynt, there lieth off a shold, which must be shunned, and therefore you must keep close alongst by the easter shore, untill you be gotten about the shold of the Castle, and then westwardes up unto the Kay of Kinsale, there you may anchor in eight or nine fathom, and lye landlockt for all windes. The towne Kinsale lieth a litle to the northwardes in a bay, where it is easie soft ground, part whereof falleth dry at low water.

Four leagues too the eastwardes off Kinsale, lieth the haven Corck, betwixt both about a league too the westwardes of Corck, you shall see (sayling alongst the coast) two steepe hommockes like Towers in the land, not farre one from the other: these are notable marcks for to know the coast. When you are thwart of the eastermost, you may see the havens mouth of Corck, that lieth in northnorthwest, within it is wide and broad, and goeth up into the land with a broad river. On the east side, somewhat within is a point, where lieth off a ledge off rocke, which must be shunned. There over against on the west side, somewhat farre, in lieth another point with an old ruined castle, there also lieth off a shold; to the northwardes if it, mengoe about to Corck. Within that Castle lieth a litle tyde haven in a sandy Bay. Within the haven lieth an lland, where men doe sayle round about, and at the south side thereof may ride. It is in this Haven of Corck at low water, seven, eight or ten fathom deepe.

A litle without the east poynt standeth an old ruined Castle upon the low land, and somewhat further east ward, a square Tower in a valley. A league to the eastwardes off the havens mouth standeth a Tower upon a high poynt, close to the water side with ten or twelve thatch houses by it. Moreover, a league further east, by a smoot point, lieth a long rock growen about with greene, upon the east side off that poynt standeth a flat tower, Further, it is to the eastwardes all lowe land, unto the point of Jochul.

Four leagues to the eastwardes of Corck-haven lieth an lland, called Ballecotton, within it men may ride for westerly & southerly windes, in foure, five, or six fathom. Corck and lland lye E. N. E. and west southwest, distant 7 or 8 leagues.

The haven of Iochul is a broad haven, where men must goe Iochull, in at high water, by the east lant it lieth in northw. and north-west and by north. The west side is a sandy strand alongst to the downe.

About a league south and by west from the havens mouth of Iochull, lieth a litle llands called Chappell: under it on the east side is a good road. He that commeth before Iochul at a low water, may goe under that foresayd lland to ride there, and stay for the last quartier flood, then there is foure fathom water upon the banck. At the west point of the Havens mouth lieth a rocke within it. About halfe wayes to the towne standeth a friery, before it men may ride they may also edge over to the east land, and then run up the river. Within it is three, foure and five fathom deep. From the east side lieth a rane of rockes, at least halfe wayes over in the havens mouth, a litle without the rocks it is at low water no more then five or six foot water, but a high water it is deepe enough.

Four leagues to the eastwardes of Iochull, lieth Dongarvan haven, betwixt bot lyeth an out point, a litle to the eastwardes of it standeth a high blacke Tower, called Ardmore, which may bee seen wel 4 leagues at sea, within is a bay, which is a good road for westerly windes in seven or eight fathom.

Dongarvan is narrow tyde-haven, the mouth off the haven is full of Rockes, and at low water it falleth drye, men must goe in there at high water, and runne in through betwixt the rocks, it lyeth in northnorthwest, within it is deepe enough. The towne Dongarvan lieth upon the west side of the haven. From Dongarvan to Waterford are eight leagues.

Within Dongarvan, northnorthwest landwards in, lieth the mountaine of Sleges, which men doe cal the high mountaine of Dongarvan, or Cape de Quin, or Caray Quin, it sheweth it selfe with three exceding high hommockes, farre above all other lands, thereabouts men may see it at sea alongst a great part of the south coast of Ireland.

When you shall have that mountaine northnorthwest from you, and sayle in right with it, you shall fall right with Dongarvan.

When you shall have it north off you, and saile in right with it, then you shall fall with Iochul; being northnortheast, then you shall fall with Corck, but when it shall be N. W. and so run in, you shall fall with waterford.

Of the Tydes and Courses of the streames.

In all these foresayd Havens maketh high water an E.N.E. and w. southwest moone, or a point later, according as they lye deepe within the land.

But a seaboard the coast in the offing, a northeast and southwest moone.

At the Mizanhead, c. Clare, and the coast to the eastwards, a w. S. w. and E. N. E. moon maketh high water, within the havens and in a draught, a point later, to wit, east and by north and west and by south. But in the channell a seaboard the land, a north east and southwest moone.

Without c. Cleare by the land, the flood falleth away E. and the ebbe west, but to the eastwards of c. Cleare e.n.e. and westsouthwest.

On these south coast of Ireland an east and n. e. and w. f. w. moone maketh high water, within the Havens a point later, to wit, an east and by north, and west and west and by south moone: but in the offing a seaboard a southwest and northeast moone.

Betwixt c. Cleare, along the coast before Waterford, into the point of Carnaroort, the flood fallt alongst the coast eastnortheast and the ebbe westsouthwest.

Of the Depth.

Betwixt c. Cleare and the Dorfeys, men may see the land in 58 and 60 fathom.

From c. Cleare to the eastwards unto Waterford, men may see the land in 44 fathom. The most part of the S. coast of Ireland, men may see it in 35 and 40 fathom. In 35 fathom you shall not be farre from the land. Wherefore come no neerer Ireland by night then in 40 fathom.

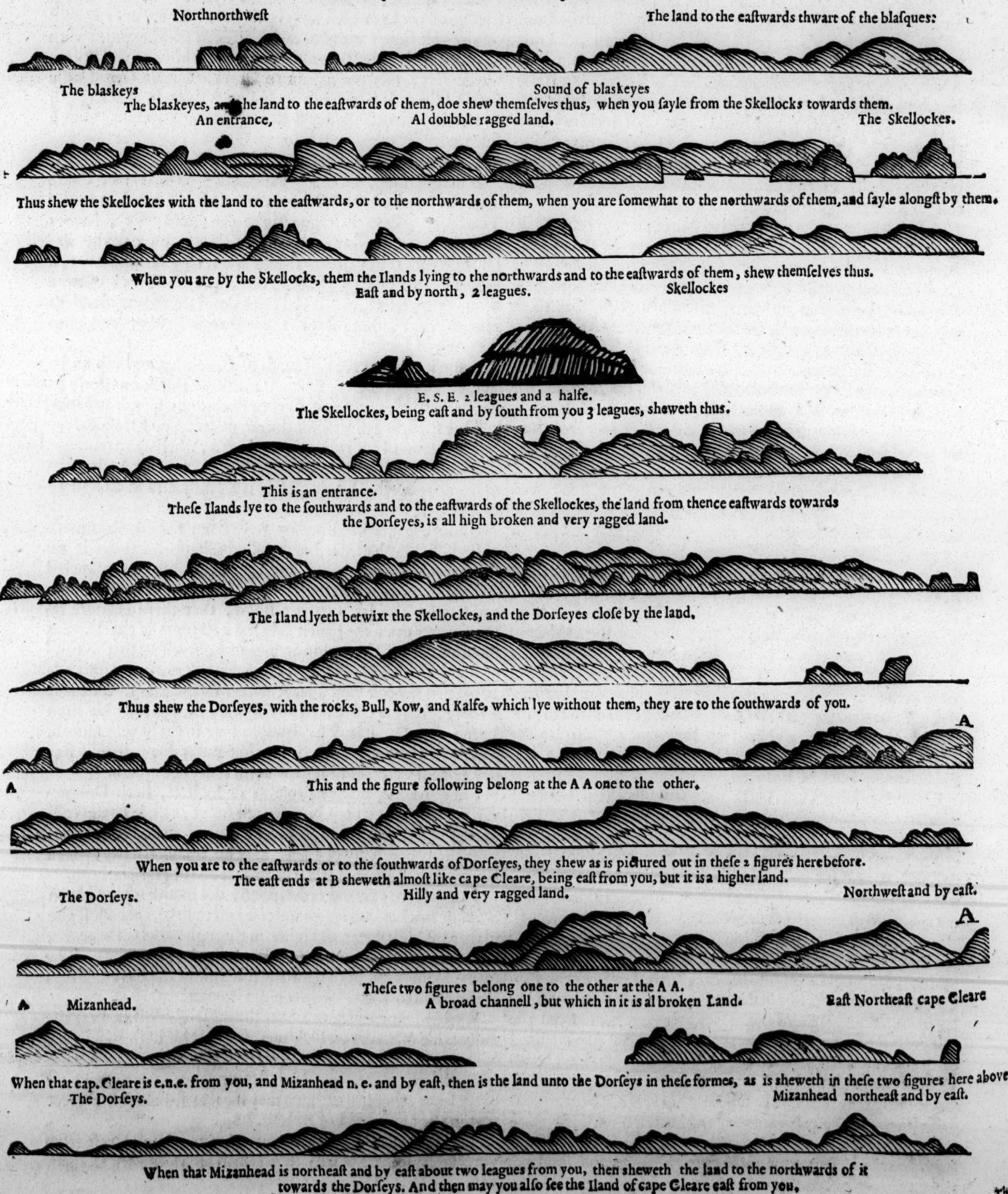
Courses and distances.

From the Sound of blaskeys unto the Skellocke, the course is south	9 leagues
From Dinglehaven unto the Skellockes, southwest and by south	8 leagues
From the Skellockes unto the Dorfeys, southeast	7 or 8 leagues
From the Dorfeys to Mizanhead eastsoutheast	7 or 8 leagues
From Mizanhead to Sheepeshead north	two great leagues
From Sheepeshead to Beerhaven, the course is north and by west, somewhat westerly, scarce	2 leagues
From Mizanhead to beerhaven north and by west	5 leagues
From beerhaven to the Island Whiddy, the course is e. n. e. and northeast and by east	7 or 8 leagues
From the Dorfeys to Silly southeast and by east	56 leagues
From the Dorfeys to cape de Finisterre is the course south and by east and south	173 leagues
From Mizanhead to cape Cleare east and by south distant,	7 leagues
From cape Cleare to Kroockhaven north west	5 leagues
From cape Cleare to Veelo or Oldhead eastnortheast	13 leagues
From cape Cleare to the lands end of England southeast and by east	53 leagues
From cape Cleare to Silly southeast	47 leagues
From cape Cleare to cape de Finisterre south	173 leagues
From Oldhead, or cape de Velho, to the haven of Kinfale, is the course north and by east	2 leagues
From Oldhead, or cape de Velho to Corck northeast and by east	5 leagues
From Corck to Waterford, the coast lyeth most eastnortheast	
From cape de Velho to the landes end of England southeast	45 leagues

Heights.

C. Cleare lyeth in	51 degrees, 12 minutes
C. de Velho, or Oldhead lyeth	51 degrees, 28 minutes

How these Lands doe shew themselves at Sea.



and the south coast off Ireland, from Ouldhead to Waterford are set forth.

41

Fafney.

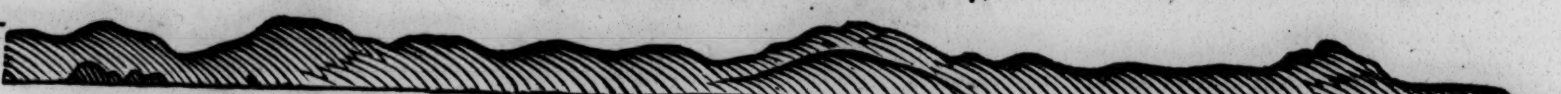
C. Cleare.

A



The forme of C. Cleare with the rock Fafney.

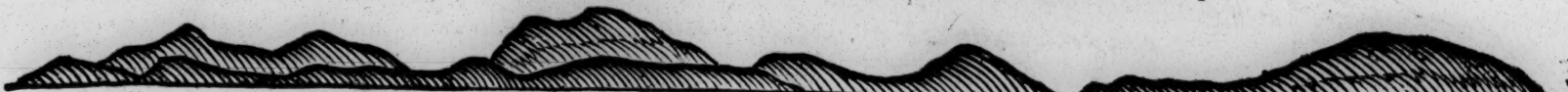
A



This belongeth to the figure going before the AA, one to the other, is the land to the eastwards of Baltemore, Rock a little to the eastwards of Baltemore.



Thus sheweth C. Cleare, when it is north from you 5 leagues, and there it is 58 fathom deepe.



C. Cleare sheweth thus, being north and by west from you.

Sharpe hills within



The C. Cleare being N. w. 7. or 8 leagues of from you, sheweth thus. If you then beare in north, you shall fall right with Oldhead, and when you come neare the shore, you shall lose sight of the high land, and it shall seeme to be all low land.

Land within

Land within

Land within



This followeth the former figure, the eastermost hommocks at A are the high hills about Iochull, which you may hardly see when C. Cleare is n. w. from you 7. or 8. leagues of, they lye farre within the land, an the clouds oftentimes hang over them.

C. Cleare

Oldhead

Point of Corck within the island

Hil within Iochul



When you are before Oldhead two leagues, or two leagues and a halfe a seaboard the land, then sheweth the land to the westwards unto C. Cleare, and the land to the eastwards of Oldhead, in this forme.



Thus sheweth Oldhead when it is w. f. w. a halfe league from you, then may you see the haven of Kinsale open,



When Oldhead is west two leagues from you, it sheweth in this forme.



When the point of Roffe is west and by north from you, it sheweth thus,



The land a little to the eastwards of Kinsale sheweth thus,



The land to the eastwards of Corck towards Iochull sheweth in this forme,



Old ruined houses.

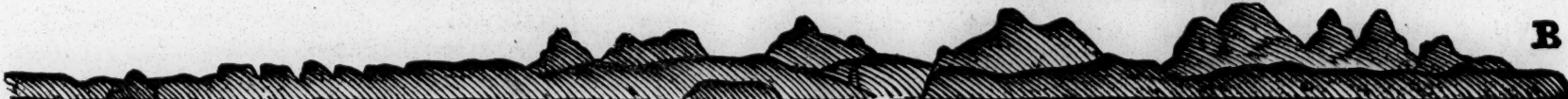
A

The Rock betwixt Iochul and corck.



When you are to the eastwards of Corck, not far from the land, and that the harbours mouth doth begin to open, then sheweth the land as is described in these two figures, as the AA, belonging one to the other, being neare the land it seemeth to be high land, but a far off (when you can see the high inner land, within Iochull over the cliffe land) it seemeth to be but low, Innerland, far within the land.

Innerland north and by west.



Mount of Iochull.

These two figures belong at the BB, one to the other, Dongarvan.

B



When you are before Iochull, or thereabouts, (two or three leagues from land) so that the high mountain of cape Quin be north and by west from you, then sheweth the land thus, the double innerland is very high blew land, you may see it in cleare wether 12 or 13 leagues off.



Corck,

Rock

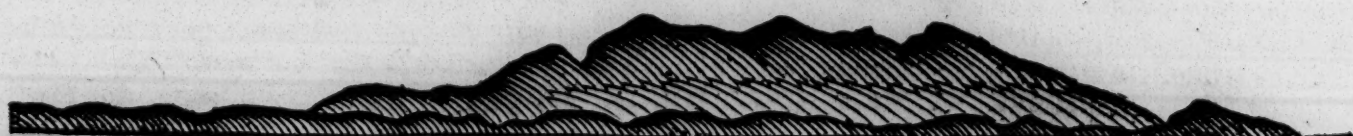
The high land of Dongarvan.

Iochull.

C



These two figures belong at the CC one to the other, and is the forme of the land betwixt Corck and Iochull. Northnortheast



The high land of Dongarvan sheweth thus, being northnorthwest from you.



Thus sheweth the high land of Dongarvan, when the westernmost end of it is northwest from you,

F 3

The

The First part of the Fiere Columnne.

THE THIRD BOOKE,

Of the

WESTERN NAVIGATION

Containg

*The description off France, Biscay, Galliaffi, Portugaell,
and Algarve, from Heyssant to the Straights off Gibraltar.*

The first demonstration,

Wherein are shewed the coasts off France from Heyssant to the River off Bordeaux.

From the Iland Ile de Bas unto the Fourné, (the outermost or westermost end of the maine land of Britaigne) the course is west south west, and west and by sout thirteene leagues. About halfe wayes betwixt them both lyeth Obbevrack, or Abberwrack.

About a league northwest without the rocks of Obbevrack or Abberwrack lieth a rane of Rocks under water. They that by night wil saile or turne to windwards from the Fourné or towards the Fourné, let them not come thereabouts nearer the land then in 45 fathom.

A league to the eastwards of the Fourné, and all alongst the coast even unto the Fourné, lye many long black ragged rocks, at many places to looke to like Villages, these are called the Ovens, within them on the maine land which is not very high, men shall see (sayling alongst by them) many white sand-bayes, and here and there some little houses, whereby the foresayd land there about is very good to bee knowne.

The Fourné and Ushant lye west south west and east northeast distant two great leagues. Ushant sheweth it selfe at sea at the sout-end low, and at the north-end going up sloping, upon the midst of it standeth a little flat Tower, by which markes it is good to be knowne.

For to sayle through within Ushant, the course from the Fourné to S. Matthews point is south southeast foure leagues. At the point of the Fourné lye two rowers of little Rockes, and to the southwards of them alongst the Coast lye three other heaps of rocks, each of them about an English mile one from the other: runne alongst within two Cables lengths by the foresayd rockes at the poynt, which is much nearer the east side, or the maine land, then Ushant, for to shun the norther Haghels, which doe lye betwixt Ushant and the foresayd rockes or Ovens, or else if you keepe S. Matthews Abbey in the low valley to the eastwards of Concoort, and sayle so right with it, then you run through neere the east side, and in the midst of the channeel betwixt the foule ground and the Blanckbay Rockes, untill you come thwart of Blanck-bay, or neare Conquets-oort, there standeth a mill upon the high land alone, when it is east from you, then the souther Hagels lie west and by north from you, and the norther Haghels northwest and by west: there is also a high flat peece of land, a little to the eastwards of the Abbey of S. Matthews, the top of it being even and plaine, like unto a long plaine house, when that commeth even without the poynt Conquets oort, and these foresayd mill be east and by south, and east south east from you, then lie the north Haghels west and by south from you, so that when the foresayd mill is east thwart from you, then are also the Haghels west thwart from you. When Halman or Hayman hill (that is a high rock lying at the east end of Ushant) commeth over the N.W. end of the northermost Mollens, by the French called Chemines, then are you also thwart of the Haghels.

Hee that must turne to windwards from the Fourné towards Conquet, or S. Matthews point, let him make use of these markes: In the poynt of Conquet haven, or Conquets-oort, are two valleys, the one is great, that is the westermost, and one little, that is the eastermost, in manner as is here portrayed.

S. Matthews Cloyster. Conquets oort.



When you runne over to the eastwards towards the land, and that the Abbey of S. Matthews commeth a Capstone Barres length to the eastwards off the smallest valley, according as is

shewed in this figure, then it is time to cast about: and when you runne over to the westwards towards Vshant, and that the foresaid Abbey of S. Matthews commeth a little without the poynt off Conquet Haven, you must also cast about, for when the foresaid Abbey commeth two shippes lengths without the foresaid point then are you close by the Haghels. The Norther and the Souther Haghels lye about a shot of a cast peece distant one from the other.

Two or three Cables lengths thwart from the point off Conquet haven, or Conquets-oort to seawards, lieth a suncken rock, which with a spring tyde commeth above water, called the Vintner, by de French le Bell. For to avoid it comming from the northwards, or from the Fourné, and being come from the foresaid markes (of S. Matthews Abbey in the great valley of Conquets-oort) unto close by Conquets-oort, then runne close about by it, alongst within a Cables length of the poynt, or keepe the Abbey of S. Matthews even without the poynt of Conquet-oort, and so close about it, within a cables length as before is said, and then you shall leave the Vintner a Cables length or two on the starboard side of you, and can take no hurt of it.

When the little Church upon the point off Conquets-oort is east from you then is the Vintner west right thwart from you, or else when that the Souther-houses off Conquet, beginne to come without, or to the point off Conquet, then you have also the Vintner, upon your side, west and west and by south from you, a little shoft off a cast peece.

If you saile into Conquet-haven, then runne about the point within a cables length, as is before said, untill you see the haven open, then you come against the Feneftiers, which are rockes that lie off about a Cables lenght from the land of Conquet-haven under water. For to avoid them, run alongst by the norther shoare, untill you come within the Haven. Betwixt the Feneftiers and the blanck Moines (that are rockes by Saint Matthews poynt) is a good Road under the Abbey of S. Matthews, as well for them that are bound to the northwards as to the southwards. If you wil goe into this road comming from Conquets-oort, then run right with the blanck Moines, untill that the Abbey of Saint Matthews be east-southeast from you, sayle then towards it untill you come before the Abbey, and ankor there in 6 or 7 fathom.

About a league to the eastwards of S. Matthews point to wards Brest, lieth a suncken rock, about halfe a shot of a east peece from the north shore. If you will sayle into Brest water, then goe from S. Matthews point away east and by south, and east south east, and keepe the north-end off the Southermost Mollens, without S. Matthews point, so long, untill that the mill upon the north-land come to the northwards of the trees, then you saile alongst to the southwards of the foresaid rock, and so doing, you can take no hurt off it; but if you bring the south end of the Mollens neare or to S. Matthews point, you shall not saile to saile upon it.

For to saile to the Northwards of the foresaid Rocke, you must runne from Saint Matthews point alongst by the North-land, and keepe the southermost Mollens hidden behinde the great Rocke that lieth off from Saint Matthews point, and saile then right with the west point of Batrams bay, untill that the foresaid mill standing upon the North-land, commeth to bee northwest and by north from you, and the trees standeth northnorthwest from you, then shall you be past the foresaid Rocke, but to runne alongst to the southwards of it, is best and broadest. For to sayle forth alongst

The second part
THE THIRD BOOK
OF THE
FIERIE - SEA - COLVMNE,

WHEREIN

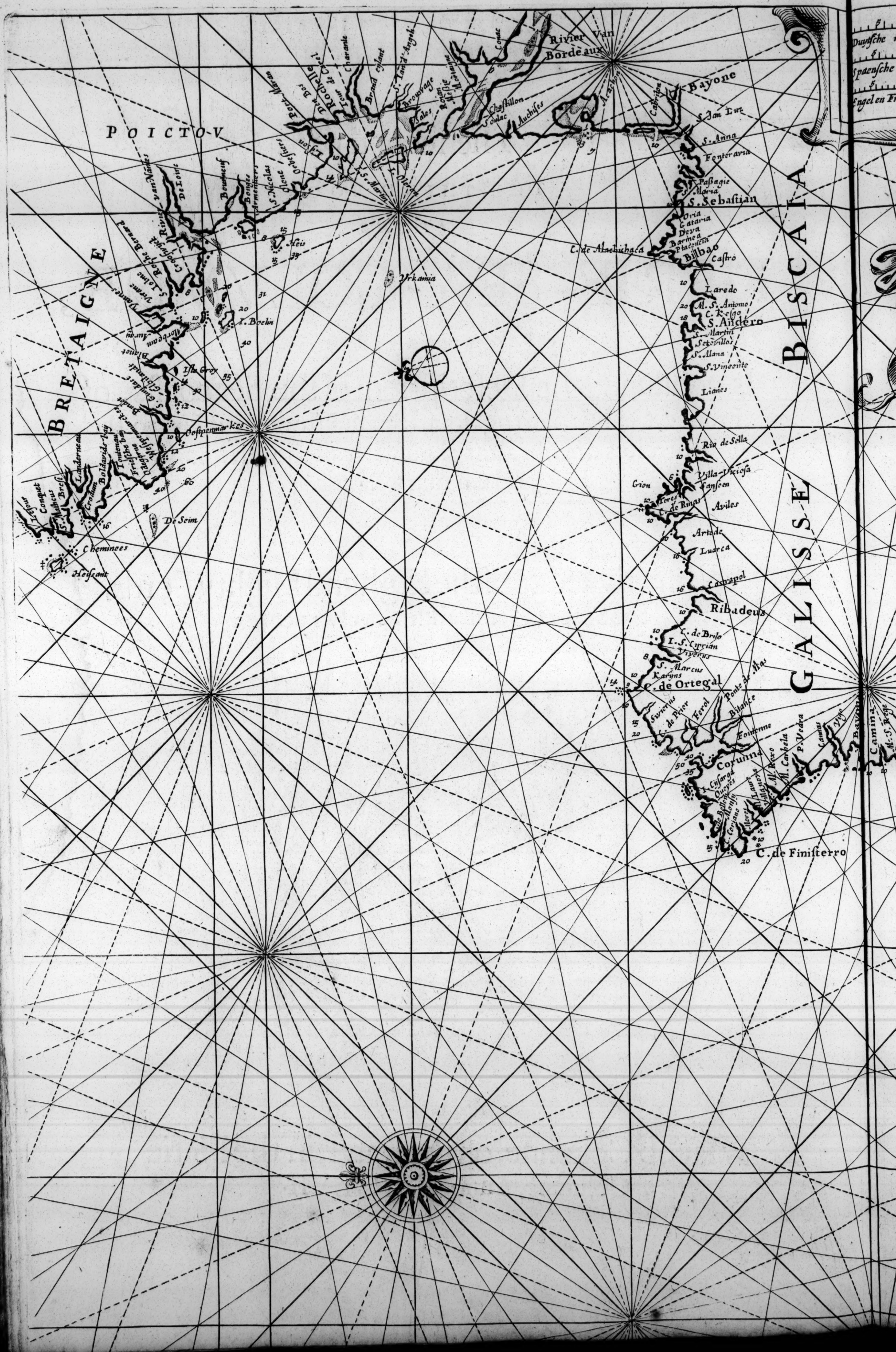
Is contained the Description, of the Seacoasts, of
France, Galissia, Portugal, and Spaine, from Heyssant, to the
Straites of Gibraltar : and with all the Flemmish
and Cannary Ilands.

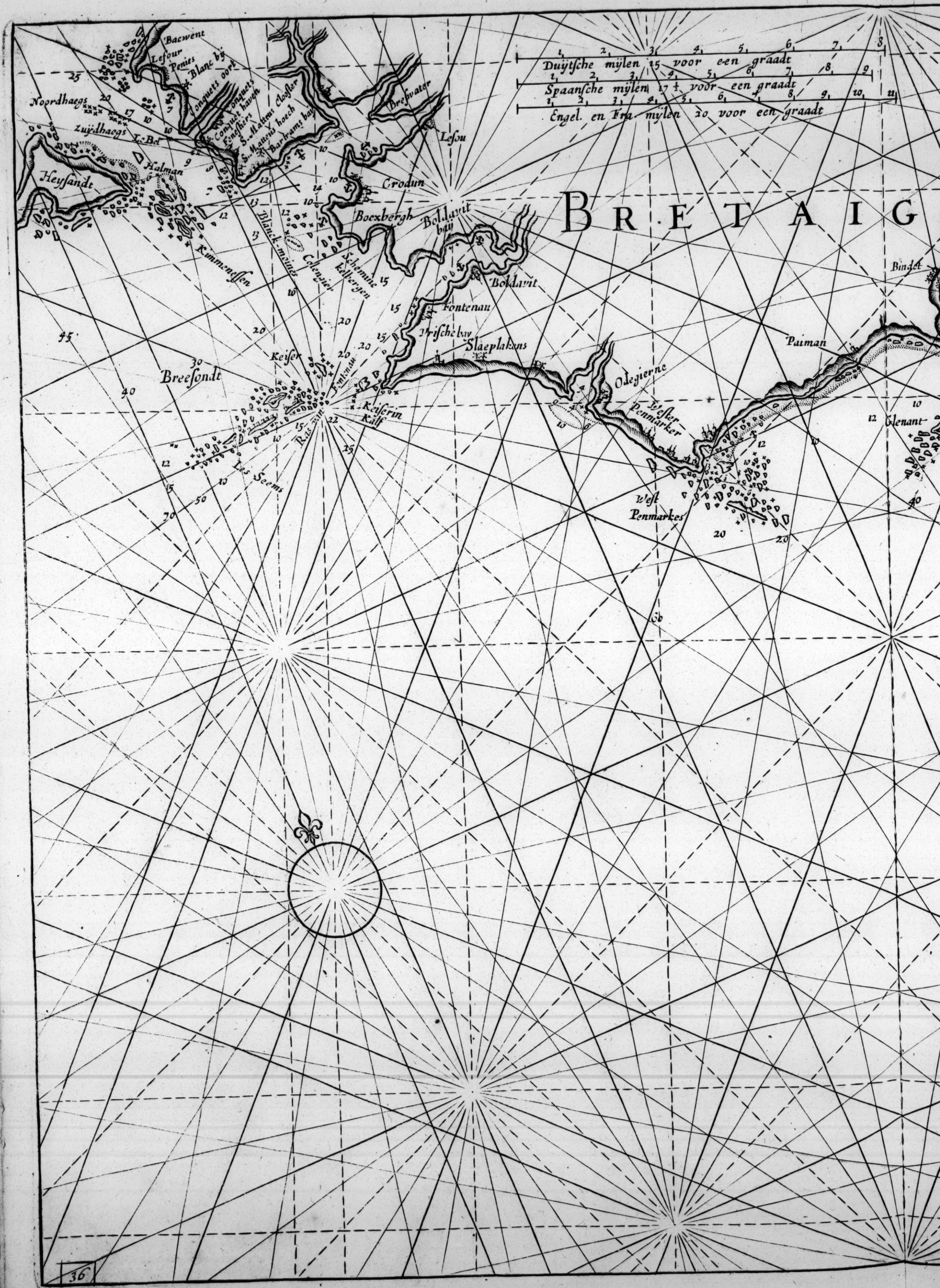
VVith priviledge of the High and Mighty Lords,
the States Generall, for twelve yeares.

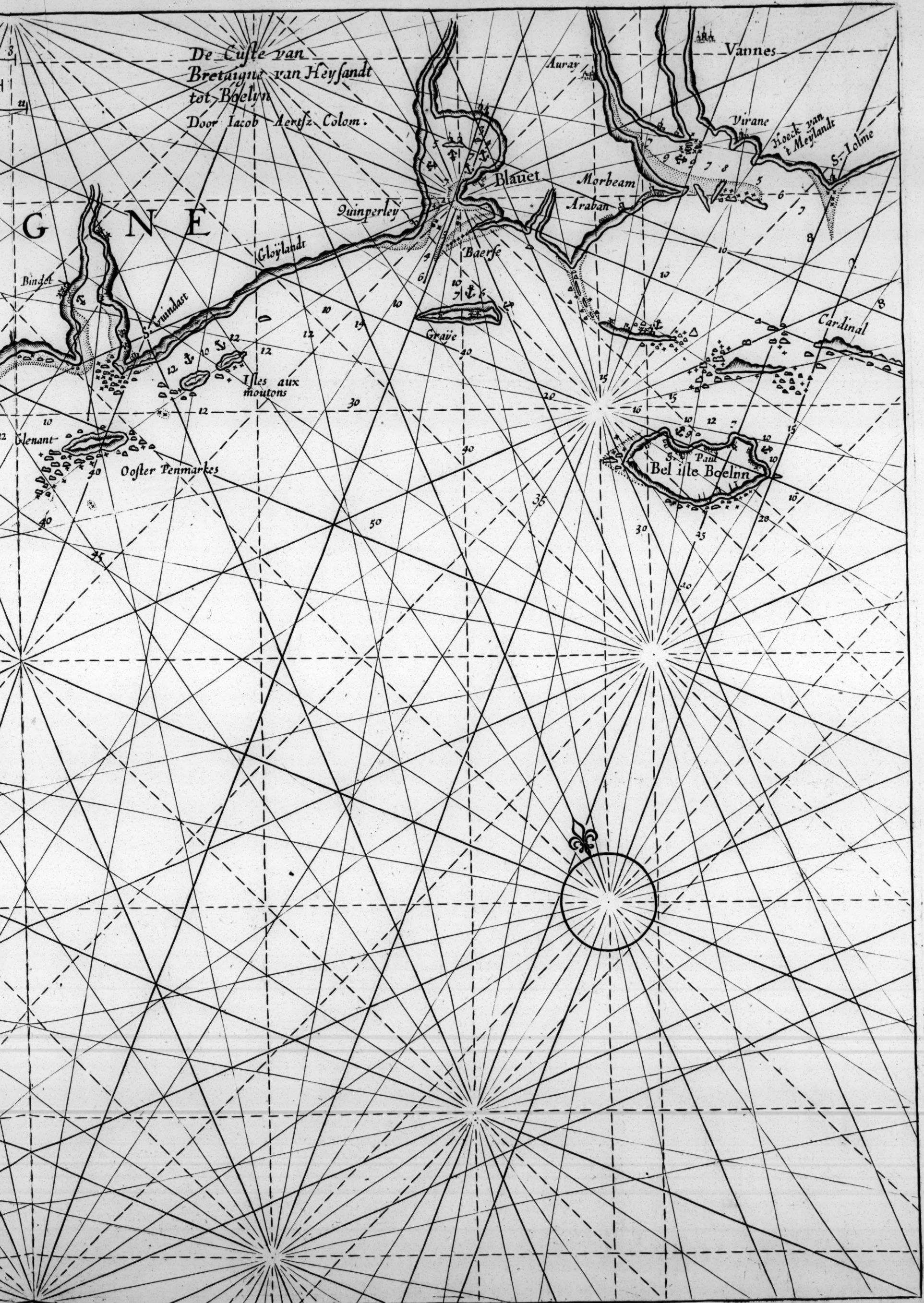


Printed at Amsterdam,

By Iacob Columnne, on the water, in the Fierie
Columnne,







Hagiane.

Lefou.

Bartrams
bay.

Goidan

Mullen

Heam
Hucke

Alcon
The f
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alch

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Sch
kelb

longst to Crest (being past the foresaid rock) you must run forth within two cables lengths alongst by the north shoare. A little within the east point off Cordon, or Claesdownes, lieth a rane off Rockes, about the middest of the channell in the mouth of Brest water, which at low water lie above water, and at high water are under water, called the Baginne, you may runne alongst on both sides off it, but to the northwards off it, is best, when the south point of Brest water commeth over the point off Croidan, then are you thwart of the foresaid Bagyne, which lieth about two cables lengths from the north shoare, runne alongst to the northwards of it: When the Brest commeth without the point, saile then so right to it, you must anchor there with an anchor to seawards in eight or nine fathom, and with a cable a shoare fast on a tree: When you come within the Bagyne, you may edge up to the eastwards, or to the southwards before the river of Landerneau or Lefou, and anchor there under the south-land, in ten, twelve, or thirteene fathom, before the little towne old Croidan. Brest-water, or the river of Landerneau, lieth in most eastnortheast, and it is Pilots water, hee that is bound in there, may take a Pilot to bring him in where hee desireth to bee. It floweth there with an ordinary tyde, three fathom up and downe, southwest and by west, and northeast and by east Moone maketh there full Sea.

If you come to anchor within Brest, you must pay for anchoring ten soubes, & for it you shall get a ticket off freedome. If it should happen that you should loose your shippe upon Britaigne, you might there with challenge your goods, else they are unfree.

Bartrams bay lieth about two leagues to the eastwards off S. Matthews point, a little league past the foresaid suncken rock, there is good anchoring for a north, and northeast wind in 10 and 11 fathom.

Over against Bartrams bay lieth Croidan or Claesdownes from S. Matthews point, southeast distant about 3 leagues, it is a great bay. For to saile from S. Matthews point to Croidan, you must keepe the southermost Mullens even without the black Moines (that are the Rockes without S. Matthews point) and go away east and by south, and eastsoutheast untill you come before the bay, and may see open into it, then you shall see a Chappell, or little Church stand upon a chindle, run in right with it, and anchor thereabouts, in 6, 7, 8, 9, or 10 fathom, there is the road.

The Mullens are the rockes which lie there to the southwards of Ushant, and to the westwards from Saint Matthews point. Betwixt them and Ushant lieth a channell northeast and southwest through, which is indifferent large and broad, and deep enough, there remaineth at low water 6, and 7, fathom water. Hee that commeth from the northwards, and can not saile a weather off Ushant and the Mullens, by reason off the flood may run through here, or he that commeth out of the Sea, and with northerley winds, can not saile a weather off Ushant, may with a flood run through heere, and so further his voiage, when men runne through here, either in or out, and keepe the middle of the channell betwixt both lands they can take no hurt.

From S. Matthews point to the race off Fontenay, or the Keiser and Lavender, the course is south and by east, five leagues, betwixt them both lie divers rocks, where off men must take good heed, as the Hen with the Chickens, the Collier, the Falconers, Scheminckelborrowes and other more. The Hen with the Chickens, and the middelmoff Falconer or Foukenisse, lie from S. Matthews point southeast and by east distant a league and a halfe, but the Collier lieth from S. Matthews point southsoutheast also a league and a halfe.

The Falconers, or Foukenissen, lie from the west point of Croidan about westsouthwest an English mile. The innermost or southermost Falconer lieth from the northermost southsoutheast about a halfe league, or two shots off a cast peece, and from Croidan southwest and by south, and is covered at high water. Northnortheast a cables length from it, lieth another suncken Rocke, which at low water may even be seene. To the westwards of the northermost Falconer lieth also suncken Rock which at low water may even be seene.

The Hen lieth from the Falcones westsouthwest about two cables lengths, or a shot off a cast peece, it is a round sharpe rocke, it is round about it deepe and cleane, in 6 and 7 fathom. The Chickens are two sharpe little rockes, which at low water may even be seene, and lie about the shot off a Base northnorthwest from the Hen, and west from the northermost Falconer.

The Scheminckelbroughts lie to the southwards off the Falconers, men may run through betwixt them in ten fathom,

to the point of Croidan, there is good road and ankor ground.

If you will saile from S. Matthews point to the Race of Fontenay, you must goe away south and by east, and bring the mill off Feneftiers, which standeth upon the east point of Conquet-haven, over the poynt off Saint Matthews, a little to the westwards off the Abbey, and keepe them so standing so long as you can see them, and you shall not come to neare the foresaid Rockes, to take any hurt off them. When as them you come to the Keyser and Keyserinne, first give the Keyser a birth, because off some suncken Rockes which lye off from the east side of it under water. From the southwest side of the Lavender runneth off a foule ledge Rockes, called the Calfe, there the tyde falleth very strong over it, with very great rippling. This Channel off the Race of Fontenay, lieth through betwixt the Keyser and Lavender southsouthwest and northnortheast. He that will saile through here, must be very careful to cast his tides wel, for it runneth most thwart over this Race, so that with a southwest wind, and an outfall or ebb, and also with calmes, it is very dangerous to come into this Race.

A little to the southwards of the Keyser, lieth the east end of the Seames, and lye from thence at least three or foure leagues westnorthwest into sea. A great league northwest from the west poynt off the Seames, lyeth a suncken rocks, where of men must take heed.

And westsouthwest about two leagues from the Seames, lieth a row of rocks, like a bancke, whereupon it is not deeper then seven fathom, but betwixt the rocks and the Seams, it is 50 fathom deepe.

Betwixt the Seames and Ushant the broad sound lieth in eastnortheast to S. Mathewes point, and from S. Mathewes point westsouthwest 5 leagues into sea.

To the eastwards of Fontenay, or the Lavender, lieth the Frieze Bay, there men may anchor for a southeast and east ends, in good ankor ground.

To the eastwards of the Frieze Bay, lieth Boldavids Bay a broad deep sound, lying into the land eastnortheast. At the east side of that haven lie 2 little Ilands or Rockes, where men may anchor round about them, and lie sheltred for alle windes.

From the Race of Fontenay to the Pennes, these course is southeast about nine leagues, betwixt them both liet Oldiarne, a good Haven, about five leagues E. S. E. from Fontenay, thwart before the entry of it lieth a banke where men may run about it on both sides in 6 fathom.

The south point of this Haven is flat, therefore run in along by the north point, there is at low water not lesse then 3 fathom depth. From Oldiarne to the Pennes it is southeast and by south.

If you will anchor before Port Kapstand, you must anchor in 12 or 13 fathom, before the village that standeth upon the high land about halfe wayes betwixt the point of the Race, & the great sand-bay of Oldjarn, where the little sharpe Tower doth stand, the point of the Race shall then lie from you about northnorthwest, and you shall then lie a great half league from the land, further off from the shore it is rocky and foule ground, as some say. There have some neverthelesse come to anchor there by night in 3 or 4 leagues from the shore in 25 fathom, but have not received any hurt neither of cables nor ankors.

The west end of the Seames, and the Pennes, lie southeast somewhat southerly, and northwest somewhat northerly, distant about 13 leagues.

The knowledge of the land betwixt Fontenay and Old-Sheets yarne, are two round hills, which men doe call the sheets, or Slaplakens, to the westwards off them stand two Mills. It is a very ragged point, and by these foresayd markes very good to be known. Men may see them without the Seames in 55 fathom.

From Oldyarne to the Pennes lieth the coast southeast & by south 5 leagues.

The Pennes are very good to be known, for him that hath seen them once: upon the southeast end standeth a thicke flat Tower; a little to the westwards of it standeth a sharpe tower, and somewhat more to the eastwards against the high land, standeth a village to see to like a castle, upon the east side thereof standeth a flat tower, and there close to the land lie 2 great rocks.

The Pennes lye off from the maine land, southeast two leagues into the sea. For to saile in there, you must come in there from the eastwards, and run alongst by the strant of the maine land, leaving all the rocks on the larboard side, untill that you come to a great rock, which you must leave on the starboard side, and runne about the southwards of it (being past it, edge

it edge within it up towards the northwest, and you may anchor there a little within, in three fathom at low water, lying there, you can see no sea, but at high water the sea cometh very much tumbling in through the Rocks: You may goe away from thence at high water southeast through the Rocks into sea, but you must take very good heed, because it is there full of Rocks, whereof some are above water, and some under water. Without the foresayd great Rock in the comming in of this haven, it is at least ten fathom deep, so that for need men might well save a great ship there.

Glanons.
Glanant.
Bindet.
From the Pennes to the Glanons or Glenant, the course is eastsoutheast with that course you shall run alongst to the southwards of them. Within the Glanons lieth a Haven, called Bindet, at the east point of that Haven it is full of rocks. For to sayle in there, you must take heed unto these marks: there stand two Mills farre within the land, bring the eastermost of the 2 over a little castle that standeth upon a point within the Haven, and run in, keeping them so north; and northeast, and by east in, and then you cannot take hurt on neither of both shores, and being come within the haven, anchor before the Town.

A league southwest from Gloyland or Glenant, by the Dutchmen, called the easter-Penmarkes, liet a great Rock under water, but is good to espied, in regard the sea alwayes breaketh upon it, as well within as without this Rock, it is 40 fathom deep.

Muttons.
Ilands.
When you come off from the Peus, with an eastsoutheast course, you shall runne alongst farre enough to the southwards of it. About 2 leagues to the eastwards of Glenant, lye the Ilands of Muttons, by the French called Isles aux Montons, you may saile through betwixt them and the main land, unto Groy or Blavet, also you may anchor within them in 10 or 12 fathom, betwixt the land and the foresaid Ilands, which are cleane upon the north side.

Betwixt the Iland Mutton and Glenant lieth a rock, for to avoid it (for them which will sayle through there betwixt them) they must leave one third part of the channell towards Glenant, and the other two third parts towards Mutton, and then they may boldly run through there without feare.

Groy.
From Mutton to the Iland Groy, the course is east and by south, upon the outer side of Groy stand 3 or 4 milles, the east end of it goeth steepe downe, and the west end sloping and flat down, thereby it is good to beknown. Vnder Groy is good anchoring for a southwest winde in fixe or seven fathom: Vnder the northeast poynt also is a good road for a west southwest and northwest winde, there is very good anchor-ground. At the southwest end runnet of a foule ledge, where of men must take good heed.

Blavet.
Within the Iland Groy lieth the Haven of Blavet, which lieth in about northwest in 4 and 5 fathom. Vpon the west side of this haven standeth a high sharpe Tower, called Quinperly, from the east poynt runneth off a great ledge of rocks, called the Baers, within it on the east side of the entry of the Haven lye two suncken Rocks, also on the west side a Rock with a hole, which at halfe ebbe is uncovered, where of men must take very good heed in the comming in; Men run in alongst by the west land, for to eschew the foresayd suncken Rock and foule grounds. The marks for to sayle in there are these, there lieth a little Iland within in the middest of the haven, which you may see when you are without the Haven. To the eastwards of that little Iland upon the maine land, standeth an Abbey, bring that Abbey right to the east poynt of the haven, which lieth within the Baers, and sayle in with it, untill you come thwart of the east poynt, within the Baers, and runne about by it: being within it, there it is wide and broad, you may anchor there before the foresayd little Iland in 5 or 6 fathom, there it is at low water 3 or 4 fathom deepe, or else men commonly runne in about, by the poynt, untill they come in the oaze.

From the Pennes unto Bell-Ile, the course is eastsoutheast one and twenty leagues, but from Groy to Bell-Ile it is southsoutheast five leagues. Bell-Ile hath at the northwest end a steepe poynt, lying out with a great saddle, thereabouts stand also some little houses, and the end goeth very steepe downe.

Road to know bell-Ile.
When as Bell-Ile lieth northnortheast from you, the west end sheweth it selfe in there parts: the westermost whereof is a great Rock, which floweth at a very high water almost under, at the east end there divided it selfe off also a great rock: by these foresayd marcks it is indifferent well to be knowne, men may see Beel-Ile out of the sea in 55 fathom. At the south side lye off many rocks and little Ilands.

Road under Bell-Ile.
If you will seeke a roade under Bell-Ile, then you must give the northwest end a good birth, off from it lieth a suncken

rock under water, a good wayes from the land: being come within it, sayle then within two Cables lengts alongst by the land, within a Base shot about by the north poynt, untill you come before the village with the little sharpe Tower, called Pauls, there standeth a castle upon the poynt to the westwards of the foresayd little Tower, anchor within that poynt in nine or ten fathom, there you shall lye landlockt for a south, south-west and northwest wind. If it blow more northerly, you must shift, and runne before the east end (which is about halfe a league broad) and anchor there in ten or eleven fathom. This Iland lieth about southeast and northwest, according as the winde bloweth, men doe shift there from one road to another, it is there every where good riding.

Within the Iland Bell-Ile, to wit, betwixt Bell-Ile, and the maine land lye many little Ilands, where at divers places men may sayle through to the Rivers of Vannes, or Morbeam, Roche, Barnad, and the river of Nants, called the Loire. Of these Ilands are three the principall, the eastermost is called the Cardinall, the east poynt whereof, and there poynt of Bell-Ile lye one from the other dire& east and by north, and west and by south about 4 leagues. The middlemost is called by some also the Cardinall, or else together with the eastermost the Cardinalls. This hath a good Haven on the north side, going in by a great Rock. From the northwest poynt of the northermost or westermost, runneth a sandy strand unto the maine land, against the poynt betwixt Blavet and Morbeam, so that men cannot sayle there betwixt that and the maine, but at high water it is most covered, and at low water lieth most drye, at low water men may goe over there one foot from the Iland to the maine land.

He that commeth from the west, and is bound to Morbeam, Roche Bernard, or other places thereabout, must run to the southwards of it, & he will not sayle about to the southwards of Bell-Ile, he may sayle through betwixt the northermost and the middlemost Iland, and also he may sayl through betwixt Bell-Ile and the foresayd Ilands, about to the eastwards of the Cardinall. The channell there betwixt them both, is about a league broad and cleane, it lieth through east south-east and southeast and by east, men may run alongst by the Cardinals either by night or by day, in 8, 9, and ten fathom, all cleane sandy ground.

For to sayle through betwixt the westermost, which is fast at the north end with the strand to the maine land, & the middlemost Iland, the course is from the northwest end of Bell-Ile eastnortheast. A little from the east end of the foresayd westermost Iland, lieth a great round rock, which you must leave on the larboard side, and run alongst by it, within two or three Cables lengths, and then you shall leave on the starboard side to seawards of you a great many rocks, some above and some under water, which lye towards the other Ilands, which you must give a greater birth to, then to the foresayd great rock. From this foresayd channell to the river of Morbeam, or S. Iolme, the course is northeast or northeast and by east or els if you run about to the eastwards to the Cardinall, and are bound to Morbeam, then goe away from the east poynt of the Cardinall, first northwest and northnorthwest and you shall have then in that fareway 8, and 9 fathom depth, goe then by little and little more northerly right with the point, which lieth to the westwards of S. Iolme, there runneth off the sayd poynt of S. Iolme, a ledge or riffe of rocks almost a halfe league into the sea, which you must leave on the starboard side, and runne into the westwards of it, betwixt the ledge and a little Iland which lieth eastsoutheast from the west poynt, and is fast to the foresayd west poynt, with rocks and foule ground, so that you cannot sayle in alongst to the westwards of it, nor through between them: so soon as you shall be entred within the foresayd little Iland, you must give west poynt a birth, and run in alongst by the east shoare, which is flat, and lieth from the Tower of S. John to the River of Vannus northwest and southeast but you must be sure to reckon your tyde well in this Channell, for it runneth in and out the River of Vannes so strong that you cannot sayle in with an ebbe, although it blow a storm, likewise doth it to the contrary with the flood, therefore you must sayle in there with a still water. At the middle poynt where the river doth devide it selfe in two (whereof the one runneth to Vannes, and the other to Auray) lye many rocks, the most part under water, which you leave on the starboard side when you are bound to Morbeam or Auray, and on the larboard side when you are bound to Vannes when you are come from so far within, that the Tower of Morbeam is west from you anchor there in the middest of the haven, in 9 fathom, and then shall Auray the innermost little Tower lye northnorthwest from you, and the other little

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S. Nazar

little Tower north and by east, but the point of Mayland east foutheast. The west shoare thwart of it is very steepe, but easie and soft, you can take no hurt of it, although you sayled right against it.

The east point of the Cardinall, and the entring of the Haven of Morbeam lye N. N. W. and S. S. E. one from the other.

From the east poynt of the Cardinall to the River of Roche Barnard, the course is right northeast: there lyeth a little Iland about halfe wayes betwixt the Cardinall and the foresayd River, or rather nearer the Cardinall then the River (for when men are by the River, they can but even see the foresaid little Iland) men runne with the foresaid course of northeast close alongst to the westwards of that litle Iland, and shall fall a little to the northwards of the river, run then within a Cables length a longst by the shoare unto it, untill that the river doe open it felve, and then sayle amidst the channel, and give the rocks a birth that lye at the easter shoare. Being come within the rocks, you may anckor there, or else sayle on against the shoare on the starboard side, and so may save ship and goods without anckor or cable, if there should be such need. At low water with an ordinary tide, there is about eleven, and with a spring nine foot water; with an ordinary tide it floweth there about a fathom, but with spring 2 fathom up and downe: the entring of the river lieth in east and by south. A little to the eastwards of the rivers mouth, lieth a great rock, which at high water is covered.

Hee that commeth from the River of Nantes, and is bound to Roche Barnard, and is not well acquainted there betwixt both, let him runne so farre to the seawards of the Cardinall (when hee is to the westwards of the Four) untill that hee run about a seaboard of that foresayd little Iland (lying halfe wayes betwixt the Cardinall and the River of Roche Barnard) then goeth he surely cleare off all the foule ground and other dangers, men may saile close alongst by it to the westwards, but to the eastwards of it lye many Rockes and showlds.

Hee that will saile alongst to eastwards or to the northwards of it, must leave about 2 third parts of the water to the Iland, and one third part towards the land, and so run through betwixt them, but must looke out wel.

Croswyck Betwixt the rivers of Roche Bernard and Nantes, lieth Old-downes, Croisill, or Croswyck, and Poelgem. Croswyck hath two poynts, within the northwest point lieth the great village of Croswyck, which hath a thick tower, and there is a great indraught like a haven, where men may goe to anckor in five, six or seven fathom: to the westwards of it standeth also a flat Church upon the high land. The land of Old-downes lieth a little to the northwards of the Church. Poelgem is a village to east wards of Croswyck, with a high sharp tower.

About two leagues from the land southwest and by S. from Croswyck, and west and by north northerly from the E. point of Poelgem, lieth a great banck, called the Four, which at some places falleth dry at low water, and lieth from Bell-Ile neare about east and lieth the longest way southwest and northeast.

For to sayl into the river of Nantes. If you will saile from Bell-Ile to the river of Nantes, then goe away from the east end of the Cardinal, or from the eastermost rocks, that lye off from the Cardinall, directly E. N. E. towards the west point of Croswyck, for to sayle a wether of the foresayd Four, so long untill it begin to showld, and that the sharp tower of Poelgem commeth against the highest of the east point of Croswyck, then you runne alongst to the northwards of the foresayd banck, goe then E. S. E. or according as the wind is east & by south, and E. S. E. on to the Rock with the hole, called Pierre-perce, but so that you come not very neare (at low water) the land somewhat to the westwards of Poelgem, for it is not cleane alongst by it. Betwixt the Four and the point of Croswyck it is in the fareway 8, 9, and 10 fathom deepe.

Pierre-perce. From the point of Poelgem eastwards lie some little Ilands and Rocks, which are very foule, come not very neare them, nor the shoare thereabouts. If it should happen that you should turne to windwards, for at low water there falleth many of the rocks dry, when you come neare the rock (with the hole) then run alongst to the northwards of it, and run in very close by it, leaving it on the starboard side of you for to avoid the foule grounds, which lye off from the point of Poelgem towards this rock. Close alongst by this rock it is 4 fathom deepe. Being past this Rock with the hole then runne all alongst by the north shoare, unto S. Nazare in 3 or 4 fathom at low water, but you must take heed of a rocky point, somewhat to the westwards of S. Nazare, the markes thereof are these: There standeth a mill upon the high land, somewhat farre within the land, when that commeth over a country-mans houses, which standeth below by the river, then are you thwart of the rocks,

being past them, keep yet the north shoare, and runne alongst by it, untill you come within the point of S. Nazare, and anckor there in 6 or 7 fathom. In the middest of the river betwixt the foresaid rocks, with the hole, and S. Nazare, lieth a row of Rocks, called Les Porceaux, these come at halfe tyde above water: Because of them, and also more other showlds, lying in the river, you must run all alongst by the north shore, as is before said.

Somewhat within S. Nazare upon the north land standeth a sharp Tower, when that commeth without the south land, then you cannot take hurt off the foresaid rocks, run alongst to the northwards of them, a little to the eastwards off them lieth another showld of Rocks, where men may run about the eastwards of it with great shippes, it is there very showld water alongst to the point; being within the point, men may anckor as is said, in 6 or 7 fathom. To the eastwards of Saint Nazare lye two other villages, and there betwixt the Villages, it is very showld and stony ground, there men must borrow over the souther shoare, but when you are halfe wayes to that eastermost Village then you may well saile right on with the point off the Village, untill you be past it, but against that eastermost Village on the south side, upon the point, lieth a banck, called Pinbuf which lieth at least halfe wayes over in the River, but men may run through betwixt the point and this bancke in 5 or 6 fathom, this is the road for shippes that are bound out to sea.

A league further in, in the middest of the river lie two stony bancks in the fareway. At Pelerin is the lading place, two leagues from Nantes, where the good is brought off with Lighters from the ships, but from S. Nazare to Nantes, or S. Nazare: Pelerin, it is Pilots water, which men do commonly take in, by the above named sharp Tower, called S. Nazare, where men (when they are within it) may anckor in 10 or 12 fathom, and stay for a Pilot.

For to run into Sea from S. Nazare, alongst to the southwards of the rock with the hole, you must run first alongst by the north shoare, as is before said, untill that you come without the second point off the River, edge then off from the north land to the middest of the River and saile a good wayes about to the southwards of Piere-perce, when as you can see the Rocke (which lieth to the northwards off Piere-perce) without the point, there it is deepe 4 fathom and a halfe, and when as Piere-perce is N. N. West, and north and by west from you, then you come thwart of the Rock, and there you finde deeper water, to wit, five, sixe and at least 7 fathom, but when you come in the fareway of Pickeliers, then you get 10 or 12 fathom water.

Before the River of Nantes lye many bancks, but at halff flood men goe over them, the south point of the River off Nantes lieth from the North point Northnorthwest and southsoutheast 4 leagues asunder, to the southwards off it, the land lieth in with a great indraught, and there men doe run in to the bay. These uneven bancks in the River of Nantes, are very unlike, sometimes men found in 15 fathom, and presently afterwards but 7 or 8 fathom.

But to saile from Bell-Ile to the bay or Armentiers you must goe E. S. E. untill that you see the Abbey of Armentiers to the eastwards of the trees, which stand within the land over the same Abbey, then goe on east and by north so long untill that the Abbey come within the castle of Armentiers, then are you within the Monck legge. Goe then againe E. S. E. untill that you bee within the rock of Pierremen, you may goe about it on both sides, and when that you can see the Graven open, then you may anckor in 7 or 8 fathom, and row a shoare to fetch a Pilot, it is Pilots water. From Bell-Ile to Armentiers, the course is east southeast about 12 or 13 leagues asunder.

From Armentiers to Use, or Heys, it is south and by east 7 leagues, and from Bell-Ile to Use or Heys, southeast 16 leagues. The Iland of Pickeliers lieth right before the point of Armentiers. Betwixt Armentiers or Pickeliers and Use, it is an uneven fareway, with many shoulds and bancks, from foure, five, sixe, and seven fathom. Upon the Use standeth a sharp tower and some little houses or milles, whereby it is very good to be knowne. It is in the fareway betwixt Use and Bell-Ile 35, and 40 fathom, but when men are within the fareway, it is 25 fathom deepe.

Under Use it is not very good riding, the sea commeth allwayes so rowling in, as if the water come through under the Iland, at the north-end it is showld water, the road is, when the Church steeples, is southwest from you, in eight or nine fathom; but men lye there not sheltred but onely for a south-west and westsouthwest winde, and it doth ripple there alwayes very much.

From

From Use to the Killiaets, or to the Iland of Saint Martens, the courses is southeast twelve or thirteene leagues. Betwixt both lieth the Bearges of Olone about halfe a league off from the land of Poictou, and east and by south seven leagues from Use in the right fareway, and in regard that it is noting but Rocks and stones, therefore it is not good to come neare them in darke weather, men may saile round about them, and at low water, they are uncovered. If you wil saile from Use, unto the Killiaets, or unto the taile of Aise, through within the Baerges, then saile on first east, and being within the Baerges off Olone, saile to the land of Poictou, which lieth from Olone to Saint Martens Iland eastsoutheast, and from Olone to the Pickelliers northwest.

For to saye
into the
Killiaets.

Marcks the
bancks be-
fore Saint
Martens.

From Olone to the Killiaets the coast lieth most eastsoutheast foure or five leagues. For to saile into the Killiaets, which is in alongst to the northwards off the Iland of S. Marten, in betwixt the foresaid Iland and the maine land of Poictou, you must goe in somewhat more northerly then the middle of the channell, or leave two third parts of the channell towards S. Martens Iland, and one third parts towards the maine land. Alongst by the Iland of Saint Martens it is uneven, and somewhat full of bancks; come not to neare also the maine land, for there lye off also some banckes, but you may borrow of them by your lead. Goe in alongst, as before is said; untill that the Church of Saint Martin be southsouthwest from you, then you shall bee past the banck which lieth north from Saint Martens, and lieth of from the shoare somewhat to the westwards of Saint Martens, that is, a hard steepe stony bancke: which shewdeth up suddenly. For to avoid it when as you must turne to and againe with an easterly, or a northeast winde, you must not bring the little Tower of Hars in the Village off Loy, but when the little Tower of Hars commeth to the first, or northermost house of Loy, then you must cast about, for then you come against the banck, where remaineth at low water about a fathom depth, and at high water about foure fathom. When the foresaid little Tower off Hars commeth aganst a mill which standeth a the south end of Loy, then are you within the bancke, to wit betwixt the Bancke and Saint Martins. When S. Martens commeth to be southwest and by south, and southsouthwest from you, then you may boldly saile over the end of the banck towards S. Martins, you shall finde there at low water and spring tide at least 3 fathom or sixteene or seventeene foot, also one cast or 2, but 12 foot then it is all soft ground, as also before Saint Martens, but the bancks are hard, and with spring tides there remaineth little water upon them. Before S. Martins you may anchor in 4, 5, or 6 fathom.

For to an-
cor before
S. Martens.

For to anchor before S. Martins, you must anchor so, that you may see open into the haven, and that the point off the Abbey, and the Bosse doe stand the length of two capstone-bars one from the other, there it is with spring tydes at low water three fathom and a halfe, but a high water six fathom and a halfe deepe.

When you saile into the Killiaets, as before is said, it is 12, 11, and 10 fathom deepe, but being come so farre that the Tower of S. Martins beginneth to standeth southwest from you, there it wil be by little and little shoulder, and then you may well edge towards the Iland in five and foure fathom, it shewdeth then suddenly up, and will be from ten, quickly 5 and 4 fathom.

If you will goe over the banck that lieth off from the Abbey with a shippe that draweth much water, then you must stay so long that it be halfe flood, for at low water there remaineth no more upon it then three fathom, or a foot or two more: when it is somewhat flowed, then you may well goe over with a great shippe. When the little Tower of Hufrow commeth to the north end off the Iland Urck, or Tivalenes, then are you upon the shouldest off the banck, but when the litle Tower commeth over the south end of that litle Iland, then it beginneth to deep againe.

The marker for to keepe the deepest water, when you run over the banck, are these: keep the great Tower of Rochel a handspikes length to the southwards of the wood off trees, which standeth upon the northermost high land, and run so over the banck, it is there all soft ground.

If you wil anchor before the Abbey within the bancke, then run in 6 or 7 fathom and anchor there.

But if you will not anchor under S. Martens, but wil saile forth towards Burnt Iland, then bring that foresaid litle Tower of Luffou over the little house that standeth upon the little Iland Vrck, and keep it so standing, and then you can take no hurt of the Laverdyne.

Laverdin.

The Laverdyne is a rane of rocks together a musket shot long, which lieth off from the east point of S. Martens Iland,

about an English mile, and with spring at low water is uncovered betwixt it and the Iland of Saint Martens men may saile through, there is depth enough. The markes of the Laverdyne are these: When you come in at the Killiaets, and saile through betwixt S. Martens Iland and the Bosse, and you come to see the great Tower off Rochel even without the point off the Bosse, then are you right thwart of the Laverdyne, which lieth then s.w. from you, it is there betwixt them both not very wide or else when the foresaid great Tower of Rochel standeth even without the point of Bosse, and the North point of the Plom a shippes length without the south point (which is the north point of the Bosse) then are you right upon the Laverdyne, therefore when Rochel commeth a shippes length to the southwards of the Bosse (when you come in at the Killiaets) then are you past the Laverdyne, and you may boldly goe on south-east, and southeast and by south towards Burnt-Iland.

Porthus is a broad and wide channell, lying in through betwixt S. Martens Iland and Oleron, and lieth from Use S. E. and by east distant about 15 leagues. If you will saile into Porthus, then run in betwixt both lands E. S. east, but much nearer S. Martens Iland, for to avoid the banck off Oleron, which is a foule ledge of rocks, at the N. end of Oleron, come no nearer it by night then in 12 or 13 fathom.

Porthus.

When you come then by the east end of Saint Martens Iland and are bound to Rochel, or else will anchor under these Bosse bring that great Tower of Rochel a shippes length without the Bosse, so you can take no hurt of the Laverdyn. You may anchor under the Bosse in 5 or 6 fathom soft ground, so that the point doe lye north from you. Or else if you will anchor under the Abbey of S. Martens Iland, then runne in upon the foresaid marcks, so long untill that the foresaid Abbey come without the S. point of the same Iland, saile then right with it, and then you shall leave the Laverdyn farr enough on the larboard side off you. And being come neare the Abbey, anchor a little to the eastwards off it in 5, 6, or 7 fathom, there is the road for ships that are bound out.

When you goe into Porthus, and will sail to the Burnt-Iland, then runne in (as before is said) untill you come neare the east end of S. Martens Iland: from thence the course is southeast and by east, or from the Bosse south or south and by east, or with a westerly wind south and by west unto that Iland.

Burnt
Iland.

When you saile so neare that Burnt-Iland that the Tower off Voorn, or the Four, commeth over the Burnt-Iland, there you may cast your ballost over board, it is there 12 fathom deepe.

If you must turne to and againe with a southerly winde from the Bosse to the Burnt-Iland, or from Burnt-Iland to the Bosse, then come not neare the land of Rochel, there lye divers stony banckest alongst the land, a good wayes from the shoare, whereof you must take heed. When Rochel is hidden behinde the south point which lieth over against the Creeke, there lieth a stony bancke, upon which remaineth not a fathom of water.

If you will saile into the river of Sherrant, then runne about to the southwards of Burnt-Iland, you may also saile about to the northwards of it, and saile in by the Tower of Voorn, or Four. At low water this river falleth dry, at least 4 leagues within the land. For to saile from Burnt-Iland to Burwage, you must saile away S. S. east and keepe the little Tower off Heers to the westwards of the wood, so long untill the Tower of Voorn or le Four, come over the little red-tyled house, that stands upon the S. side off the river of Sherrant saile then in S. E. and by little and little S. E. and by east untill that Front (a village that lieth upon the strand) commeth to the N. wards off Soubise, when as then Soubise commeth within the foresaid village, and the mill above the village, then you shall be against the point off Oysterbanck, goe then in alongst S. E. and by south, and bring that outermost litle Tower off Heers, over the outermost sandy place, where the gallows standeth by, keep them so standing, and saile in southsoutheast, when as then the little Tower off Heers commeth to the eastside of the valley, which is in the wood, then keepe that sharpe litle tower right over the east side of the valley, of the wood, and saile in so into the Creeke, or river of Burwage. At Burwage was wont not to stand a house, where now is a strong faire Towne, being builded so within 70 or 80 yeares past.

Oyster-
banck.

The Banner lieth alongst the land of Oleron and lieth untill within Burnt-Iland, at low water it is uncovered, and the tayle of it lieth farre to the northwards. If you should turn out from the Creek towards the Burnt Iland, then bring the Tower of Rochel not without the Burnt Iland, before you come thwart of it, because of the Baniard, and then you shall take no hurt of it.

At

South end of Oleron, betwixt Oleron and the land to the wards of it, is yet another channell, where men may sail and out, called the Mamme-sound, deep enough for galleys, it lieth in from out of the sea east and by n. being come within, there runneth up a river southeast towards Sales, the men doe lade salt, being past that, to the other point of Mamme-sound, lieth a plate, whereof men runne to the wards upon these marks: you must keepe the mill that stand upon the lands of Oleron over the trees, and so you shall to the northwards of the plate, there is the road for them will lade salt at Oleron or Olderdorp.

But if will runne in through, and out againe, then you must sail farre to the eastwards, untill that Sales come over the trees, which stand within Merven, for to avoyd the taylor or that shooteth of from Oleron: when Sales commeth over trees, sayle then north and by west on, to the Burnt-Iland but bring Duke Charles Tower to the S. wards of the E-Iland, for not to faile within the Banniard. When the Tower of Heers commeth to the wood keepe it then soiling untill Rochell commeth over the North-side of the Burnt-Iland, sayle then out at the Portrush. There shooteth of a riffe from the west end of Saint Martens Iland, where you must take heed.

About 10, or a little more westerly thirteene leagues from the Il Use, southwest and by west from the Iland S. Martens, an. n. w. or somewhat more northerly from the River, of Beaux, lye the Rockes of Rockedon, or Rochebon, of somalled Urkamia, in forme of a Trevet or Brandize. The fiermost of the three is the shouldest, whereupon remain at low water about two fathom depth: At the southeast side ground is black little stones, and at the N. east side whilnd, but you may not come neare them by your lead souby them.

A little to the westwards, not farre from the foresayd rocks, lyeth another rock, whereupon is at low water 5 fathom water, everthelesse with a storme the sea breaketh terribly upon.

Of depths and grounds about these places.

At Abberwrack eastnortheast & westsouthwest moone maketh full sea. Without Ushan westsouthwest and e. n. e. moone, and within the Trade a f. w. and by west the maketh full sea.

At S. Mathewelint, a southwest and northeast moon maketh highest water.

In the broad Sound, betwixt Vshant and the Seames a westsouthwest and eastnortheast moon maketh the highest water: The flood falleth very strong upon Vshant, and the southwards of it through the Mullens. Thwart over the Trade, towards Backovens. Likewise in through the broad Sound unto Breft. Also alongst by Mathewes point towards the Fourne, or Backovens, with very great rippling. He that commeth sayling about Vshant, must reckon thereupon.

In the Race of Fonay a f. w. and by f. and n. e. and by n. moon maketh full sea. The flood fith very strong thorow betwixt the Keyfer, somewhat thwart over towards Lavender, with very great rippling over the Calfe, (that is the ledge of rocks, which lyeth of from the Lavender) and from thence forth n. and n. d. by w. inwards to S. Mathewes point: with calms men must take very good heed not to be miscaried away with the current. With stormy weather of the n. or f. it is not without danger to come in this channell, especially when an ebbe or out fall.

On these coasts of Bretagne, and the Iland thereabouts, a f. w. and n. east moon maketh the high water: but within the havens, rivers, indraughts, & bays, a f. w. and by land n. e. and by e. moone, or a point later, according as the havens or rivers lye deepe in the land. Men doe not reckon there any setting or running the streames, for the flood commeth (through the swelling of the great Ocean) right against the coasts, and so runneth onely into the havens, the contrarywise goeth thwart from the shoare to seawards, when it falleth: that men cannot perceive any course of streames except it bee a little through, or about some points of Ilands.

On these lands, as on all the coasts of Britaigne, a northeast and southwest moon maketh high water and within the havens, rivers and in-draughts, a point or two later according as they lye far within the land.

On the coastes and Ilands a f. w. and n. e. moone maketh high water, within the land.

Of the depths about the places, and in what depths men may see the land.

Thwart of Abberwrack 5 leagues from the land, it is deep 50 and 55 fathom. The Backovens, or the land of the Fourne men may see in 50 fathom.

Vshant being about 1. from you, you may see in 50 fathom.

Southwest from Vshant 5 or 6 leagues of it is deepe 75 fathom, and then you may see the land from the poop.

In the broad Sound it is 45 fathom.

A little without the Seames, about a league, it is deepe 50 fathom.

Men may see the Seames and the Sheete, or Slaelaken, in 60 or 65 fathom.

Betwixt Vshant and the Seames in the fareway it is deepe 55 fathom. Thwart of the Pennes and the Glanons men may see the land in 55 and 60 fathom.

Bell-Ile men may see from below in 55, but under the top in 60 fathom. Without Vse it is 35 fathom deep, and then men may see the land from below: when it is cleare weather men may see it in 60 fathom.

The land of Olohe men may see it from below in 25 and 30 fathom.

S. Martens Iland and the north end of Oleron men may see in 28 and 30 fathom. When men get sight of S. Martens Iland, they shall see upon it a high Tower, with a high house, and upon the strand a mill with foure or five high sand-hills. Upon Oleron men shall see a high spire Tower, upon a red point, wheremen shall see some three stand over it and to the southwards of it, is at two or three places ragged sand-hills.

How these lands doe lye one from the other, and from other lands.

From Ile de Bas, to the fourne, westsouthwest 16 leagues
From the Fourne to S. Mathewes point f. f. e. and f. e. and by f. 4 leagues
From S. Mathewes point to Croydon, or Claefdowne e. f. e. 3 leagues
From S. Mathewes point to the Race of Fontenay, or the Keyfer, south and by east 5 leagues

From Vshant to Portland northeast 53 leagues
From Vshant to the Steart northeast and by north 40 leagues

From Vshant to the Lizart north 29 leagues
From Vshant to Silly northwest and by north 37 leagues

From Vshant to cape Cleare in Ireland northwest 84 leagues
From Vshant to the Iland of S. Michaels, southwest and by west 360 leagues

From Vshant to the cape Finisterre southsouthwest westerly 113 leagues
From Vshant to Cifarga southsouthwest 77 leagues

From Vshant to cape Prior southsouthwest 160 leagues
From Vshant to cape de pinas south 97 leagues

From Vshant to Laredo southsoutheast 113 leagues
When men sayl away south and by east from Vshant, then they run a little without the Seames

From the Race of Fontenay to the pennes southaest 9 leagues
From Fontenay to Oldyarne eastsoutheast 5 leagues

From Oldyarne to the pennes southaest and by south 5 leagues
From the west end of the Seames to the pennes e. f. e. somewhat southerly 13 leagues

From the Seames to the Band or Crage of Oleron southe. & by e. 112 leagues
From the Seames to the bayone in France southeast 112 leagues

From the Seames to S. Sebastians southeast and by south 112 leagues
From the Seames to Bilbaw southsoutheast, easterly 110 leagues

From the Seames to S. Andero southsoutheast 19 leagues
From the Seames to cape de pinas, or Tores, south 88 leagues

From the Seames to Ribadeus, south and by west 93 leagues
From the Seames to cape de Ortegall, southsouthwest southerly 90 leagues

From the Seames to cape Finisterre f. w. and by south, southerly 112 leagues
From the Seames to Silly, northnorthwest 45 leagues

From the pennes to the Glanons, the course is eastsoutheast 5 leagues
From Glanons to Gloyland to Groy, east and west 9 leagues

From the east end of Groy to the west end of Bell-Ile, the course is south-southeast 5 leagues
From Glanons, or Gloyland, to Bell-Ile, southeast and by east 12 leagues

From the north west end of Bell-Ile to the southeast end, the course is southeast and by east 5 leagues
From the pennes to bell-Ile eastsoutheast 21 leagues

From the east end of bell-Ile to the east end of the Cardinall, east and by north 4 leagues
From the east point of the Cardinall, to the entring of Morbeam northnorth-west 4 leagues

From the pennes to Viverus, southsouthwest 88 leagues
From the pennes to Cifarga, southwest and by south 104 leagues

From Groy to Viverus, southwest and by south 93 leagues
From Groy to cape de Finisterre, southwest 123 leagues

From Bell-Ile to the river of Bourdeaux, southeast 50 leagues
From bell-Ile to S. Sebastians, southsoutheast southerly 80 leagues

From bell-Ile to S. Andero, south 73 leagues
From bell-Ile to cape de pinas, or Tores southsouthwest 80 leagues

From bell-Ile to cape de Ortegall, southwest 90 leagues
From bell-Ile to cape de Finisterre, southwest 123 leagues

From the east point of the Cardinall to Crowswyck, e. n. e. 5 leagues
From the point of Crowswyck to pierceperce, e. f. e. 3 leagues

From the Cardinall to Old-downes, e. n. e. 7 leagues
From the north point of the river of Nantes, to the picqueliens, e. f. e. 7 leagues

From Pierremen to Armentiers westsouthwest 2 leagues
From Armentiers or Pickeliens to the west end of Vse, south and by east and southsoutheast at least 7 leagues

From the east end of bell-Ile to Vse, southeast easterly 16 leagues
From Vse to the Barges of Olone, east and by south 7 leagues

From Vse to the Killiathes, or S. Martens Iland, e. f. e. 12 or 13 leagues
From Vse to cape de pinas, f. w. and by south 75 leagues

From Vse to cape de Ortegall, f. w. and by w. 93 leagues
From Vse to S. Martins Iland, or the Killiathes, the course is e. f. e. 12 or 13 leagues

From Vse to Portrush, or the Band of Oleron, the course is southeast and by east 15 or 16 leagues
From the Band or Crage of Oleron to the Tower of Cordan f. f. e. and south and by east 13 leagues

From S. Martins Iland to the tower of Cordan, or the river of Bourdeaux, southsoutheast 16 leagues
From S. Martins Iland to cape de pinas, S. w. 80 leagues

From S. Martins Iland to Ortegall, the course is westsouthwest somewhat southerly 99 leagues

Heights.

Vshant lyeth in 48 degrees 30 minutes
The Seames lye in 48 degrees 5 minutes
The Iland bell-Ile lyeth in 47 degrees 50 minutes
The Iland Vse in 46 degrees 48 minutes
The north point of Oleron in 46 degrees 15 minutes

How these Lands doe shew themselves at Sea.

Thant is south and by west from you 4 leagues, it sheweth it selfe in this forme



Thant, being south and by east from you 4 leagues, sheweth it selfe thus.

When Vshant is northnortheast from you, it sheweth thus.



Vshant, being S. and by E. from you 3 leagues, sheweth it selfe thus.

From Use to the Killiaets, or to the Iland of Saint Martens, the courses is southeast twelve or thirteene leagues. Betwixt both lieth the Bearges of Olone about halfe a league off from the land of Poictou, and east and by south seven leagues from Use in the right fareway, and in regard that it is noting but Rocks and stones, therefore it is not good to come neare them in darke weather, men may saile round about them, and at low water, they are uncovered. If you wil saile from Use, unto the Killiaets, or unto the taile of Aise, through within the Baerges, then saile on first east, and being within the Baerges off Olone, saile to the land of Poictou, which lieth from Olone to Saint Martens Iland eastsoutheast, and from Olone to the Pickelliers northwest.

For to sayl
into the
Killiaets.

Marcks the
bancks be-
fore Saint
Martens.

From Olone to the Killiaets the coast lieth most eastsouth-east foure or five leagues. For to saile into the Killiaets, which is in alongst to the northwards off the Iland of S. Marten, in betwixt the foresaid Iland and the maine land of Poictou, you must goe in somewhat more northerly then the middle of the channell, or leave two third parts of the channel towards S. Martens Iland, and one third parts towards the maine land. Alongst by the Iland of Saint Martens it is uneven, and somewhat full of bancks; come not to neare also the maine land, for there lye off also some banckes, but you may borrow of them by your lead. Goe in alongst, as before is said, untill that the Church of Saint Martin be southsouthwest from you, then you shall bee past the banck which lieth north from Saint Martens, and lieth off from the shoare somewhat to the westwards of Saint Martens, that is, a hard steepe stony bancke: which shewdeth up suddenly. For to avoid it when as you must turne to and againe with an easterly, or a northeast winde, you must not bring the little Tower of Hars in the Village off Loy, but when the little Tower of Hars commeth to the first, or northermost house of Loy, then you must cast about, for then you come against the banck, where remaineth at low water about a fathom depth, and at high water about foure fathom. When the foresaid little Tower off Hars commeth aganst a mill which standeth a the south end of Loy, then are you within the bancke, to wit betwixt the Bancke and Saint Martins. When S. Martens commeth to be southsouthwest and by south, and southsouthwest from you, then you may boldly saile over the end of the banck towards S. Martins, you shal finde there at low water and spring tide at least 3 fathom or sixteene or seventeene foot, also one cast or 2, but 12 foot then it is al soft ground, as also before Saint Martens, but the bancks are hard, and with spring tides there remaineth little water upon them. Before S. Martins you may ankor in 4, 5, or 6 fathom.

For to an-
kor before
S. Martens.

For to ankor before S. Martins, you must ankor so, that you may see open into the haven, and that the point off the Abbey, and the Bosse doe stand the length of two capstone-bars one from the other, there it is with spring tydes at low water three fathom and a halfe, but a high water six fathom and a halfe deepe.

When you saile into the Killiaets, as before is said, it is 12, 11, and 10 fathom deepe, but being come so farre that the Tower of S. Martins beginneth to standeth southwest from you, there it wil be by little and little shoulder, and then you may well edge towards the Iland in five and foure fathom, it shewdeth then suddenly up, and will be from ten, quickly 5 and 4 fathom.

If you will goe over the banck that lieth off from the Abbey with a shippe that draweth much water, then you must stay so long that it be halfe flood, for at low water there remaineth no more upon it then three fathom, or a foot or two more: when it is somewhat flowed, then you may well goe over with a great shippe. When the little Tower of Hufrow commeth to the north end off the Iland Urck, or Tivalenes, then are you upon the shouldest off the banck, but when the litle Tower commeth over the south end of that litle Iland, then it beginneth to deep againe.

The marker for to keepe the deepest water, when you run over the banck, are these: keep the great Tower of Rochel a handspikes length to the southwards of the wood off trees, which standeth upon the northermost high land, and run so over the banck, it is there all soft ground.

If you wil ankor before the Abbey within the bancke, then run in 6 or 7 fathom and ankor there.

But if you will not ankor under S. Martens, but wil saile forth towards Burnt Iland, then bring that foresaid litle Tower of Luffou over the little house that standeth upon the little Iland Vrck, and keep it so standing, and then you can take no hurt of the Laverdyne.

Laverdin.

The Laverdyne is a rane of rocks together a musket shot long, which lieth off from the east point of S. Martens Iland,

about an English mile, and with spring at low water is uncovered betwixt it and the Iland of Saint Martens men may saile through, there is depth enough. The markes of the Laverdyne are these: When you come in at the Killiaets, and saile through betwixt S. Martens Iland and the Bosse, and you come to see the great Tower off Rochel even without the point off the Bosse, then are you right thwart of the Laverdyne, which lieth then s.w. from you, it is there betwixt them both not very wide: or else when the foresaid great Tower of Rochel standeth even without the point of Bosse, and the North point of the Plom a shippes length without the south point (which is the north point of the Bosse) then are you right upon the Laverdyne, therefore when Rochel commeth a shippes length to the southwards of the Bosse (when you come in at the Killiaets) then are you past the Laverdyne, and you may boldly goe on south-east, and southeast and by south towards Burnt-Iland.

Porthus is a broad and wide channell, lying in through betwixt S. Martens Iland and Oleron, and lieth from Use S. E. and by east distant about 15 leagues. If you will saile into Porthus, then run in betwixt both lands E. S. east, but much nearer S. Martens Iland, for to avoid the banck off Oleron, which is a foule ledge of rocks, at the N. end of Oleron, come no nearer it by night then in 12 or 13 fathom.

When you come then by the east end of Saint Martens Iland and are bound to Rochel, or else will ankor under these Bosse bring that great Tower of Rochel a ships length without the Bosse, so you can take no hurt of the Laverdyn. You may ankor under the Bosse in 5 or 6 fathom soft ground, so that the point doe lye north from you. Or else if you will ankor under the Abbey of S. Martens Iland, then runne in upon the foresaid marcks, so long untill that the foresaid Abbey come without the S. point of the same Iland, saile then right with it, and then you shall leave the Laverdyn far enough on the larboard side off you. And being come neare the Abbey, ankor a little to the eastwards off it in 5, 6, or 7 fathom, there is the road for ships that are bound out.

When you goe into Porthus, and will sail to the Burnt-Iland, then runne in (as before is said) untill you come neare the east end of S. Martens Iland: from thence the course is southeast and by east, or from the Bosse south or south and by east, or with a westerly wind south and by west unto that Iland.

When you saile so neare that Burnt-Iland that the Tower off Voorn, or the Four, commeth over the Burnt-Iland, there you may cast your ballost over board, it is there 12 fathom deepe.

If you must turne to and againe with a southerly winde from the Bosse to the Burnt-Iland, or from Burnt-Iland to the Bosse, then come not neare the land of Rochel, there lye divers stony banckest alongst the land, a good wayes from the shoare, whereof you must take heed. When Rochel is hidden behinde the south point which lieth over against the Creeke, there lieth a stony bancke, upon which remaineth not a fathom of water.

If you will saile into the river of Sherrant, then runne about to the southwards of Burnt-Iland, you may also saile about to the northwards of it, and saile in by the Tower of Voorn, or Four. At low water this river falleth dry, at least 4 leagues within the land. For to saile from Burnt-Iland to Burwage, you must saile away S. S. east and keepe the little Tower off Heers to the westwards of the wood, so long untill the Tower of Voorn or le Four, come over the little red-tyled house, that stands upon the S. side off the river of Sherrant saile then in S. E. and by little and little S. E. and by east untill that Front (a village that lieth upon the strand) commeth to the N. wards off Soubise, when as then Soubise commeth within the foresaid village, and the mill above the village, then you shall be against the point off Oysterbanck, goe then in alongst S. E. and by south, and bring that outermost litle Tower off Heers, over the outermost sandy place, where the gallows standeth by, keep them so standing, and saile in southsoutheast, when as then the little Tower off Heers commeth to the eastside of the valley, which is in the wood, then keepe that sharpe litle tower right over the east side of the valley, of the wood, and saile in so into the Creeke, or river of Burwage. At Burwage was wont not to stand a house, where now is a strong faire Towne, being builded so within 70 or 80 yeares past.

The Bannier lieth alongst the land of Oleron and lieth untill within Burnt-Iland, at low water it is uncovered, and the tayle of it lieth farre to the northwards. If you should turn out from the Creek towards the Burnt Iland, then bring the Tower of Rochel not without the Burnt Iland, before you come thwart of it, because of the Baniard, and then you shall take no hurt of it.

At

Baniard. At the south end of Oleron, betwixt Oleron and the land to the southwards of it, is yet another channell, where men may saile in and out, called the Mamme-sound, deep enough for great ships, it lieth in from out of the sea east and by n. being come there within, there runneth up a river southeast towards Sales, where men doe lade salt, being past that, to the other point of the Mamme-sound, lieth a plate, whereof men runne to the northwards upon these marks: you must keepe the mill that standeth upon the lands of Oleron over the trees, and so you shall run to the northwards of the plate, there is the road for them that will lade salt at Oleron or Olderdorp.

But if you will runne in through, and out againe, then you must saile so farre to the eastwards, untill that Sales come over the threes, which stand within Merven, for to avoyd the taylor or riffe that shooteth of from Oleron: when Sales commeth over the trees, sayle then north and by west on, to the Burnt-Iland, but bring Duke Charles Tower to the S. wards of the Burnt-Iland, for not to saile within the Banniard. When the litle Tower of Heers commeth to the wood keepe it then so standing untill Rochell commeth over the North-side of the Burnt-Iland, sayle then out at the Portrush. There shooteth of also a riffe from the west end of Saint Martens Iland, whereof you must take heed.

About south, or a little more westerly thirteene leagues from the Iland Use, southwest and by west from the Iland S. Martens, and w. n. w. or somewhat more northerly from the River, of Bourdeaux, lye the Rockes of Rockedon, or Rochebon, of some called Urkamia, in forme of a Trever or Brandize. The southermost of the three is the shouldest, whereupon remaineth at low water about two fathom depth: At the southeast side the ground is black little stones, and at the N. east side white sand, but you may not come neare them by your lead sound by them.

A little to the westwards, not farre from the foresayd rocks, lyeth yet another rock, whereupon is at low water 5 fathom water, nevertheless with a storme the sea breaketh terribly upon it.

Of the depths and grounds about these places.

At Abberwrack and eastnortheast & westsouthwest moone maketh full sea. Without Ushant a westsouthwest and e. n. e. moone, and within the Trade a f. w. and by west moone maketh full sea.

At S. Matthews point, a southwest and northeast moon maketh highest water.

In the broad Sound, betwixt Vshant and the Seames a westsouthwest and eastnortheast moone maketh the highest water: The flood falleth very strong upon Vshant, and to the southwards of it through the Mullens. Thwart over the Trade, towards the Backovens. Likewise in through the broad Sound unto Brett. Also alongst by S. Matthews point towards the Fourne, or Backovens, with very great rippling. He that commeth sayling about Vshant, must reckon thereupon.

In the Race of Fontenay a f. w. and by f. and n. e. and by n. moon maketh full sea. The flood falleth very strong thorow betwixt the Keyser, somewhat thwart over towards the Lavender, with very great rippling over the Calfe, (that is the ledge of rocks, which lyeth of from the Lavender) and from thence forth n. and n. and by w. inwards to S. Matthews point: with calms men must take very good heed not to be miscaried away with the current. With stormy weather out of then, or f. it is not without danger to come in this channell, especially with an ebbe or out fall.

On these coasts of Britaigne, and the Iland thereabouts, a f. w. and n. east moon maketh the highest water: but within the havens, rivers, indraughts, & bayes, a f. w. and by w. and n. e. and by e. moone, or a point later, according as the havens or rivers doe lye deepe in the land. Men doe not reckon there any setting or running of the streames, for the flood commeth (through the swelling of the great Ocean) right against the coasts, and so runneth onely into the havens, the ebbe contrariwise goeth thwart from the shoare to seawards, when it falleth: so that men cannot perceive any course of streames except it bee a litle through, or about some points of Ilands.

On these lands, as on all the coasts of Britaigne, a northeast and southwest moon maketh high water, and within the havens, rivers and indraughts, a point or two later according as they lye far within the land.

On the coastes and Ilands a f. w. and n. e. moone maketh high water, within the land

Of the depths about the places, and in what depths men may see the land.

Thwart of Abberwrack 5 leagues from the land, it is deep 50 and 55 fathom. The Backovens, or the land of the Fourne men may see in 50 fathom. Vshant being about f. from you, you may see in 50 fathom.

Southwest from Vshant 5 or 6 leagues of it is deepe 75 fathom, and then you may see the land from the poop.

In the broad Sound it is 45 fathom.

A litle without the Seames, about a league, it is deepe 50 fathoms. Men may see the Seames and the Sheete, or Slaeplaken, in 60 or 65 fathom.

Betwixt Vshant and the Seames in the fareway it is deepe 55 fathom. Thwart of the Pennes and the Glanons men may see the land in 55 and 60 fathom.

Bell-Ile men may see from below in 55, but under the top in 60 fathom. Without Vse it is 35 fathom deep, and then men may see the land from below: when it is cleare weather men may see it in 60 fathom.

The land of Olohe men may see it from below in 25 and 30 fathom.

S. Martens Iland and the north end of Oleron men may see in 28 and 30 fathom. When men get sight of S. Martens Iland, they shall see upon it a high Tower, with a high house, and upon the strand a mill with foure or five high sand-hills. Upon Oleron men shall see a high spire Tower, upon a red point, wheremen shall see some threes land over it and to the southwards of it, is at two or three places ragged sand-hills.

How these lands doe lye one from the other, and from other lands.

From Ile de Bas, to the fourne, westsouthwest	16 leagues
From the Fourne to S. Matthews point f.f.e. and f.e. and by f.	4 leagues
From S. Matthews point to Croydon, or Claefdowne e.f.e.	3 leagues
From S. Matthews point to the Race of Fontenay, or the Keyser, south and by east	5 leagues
From Vshant to Portland northeast	53 leagues
From Vshant to the Steart northeast and by north	40 leagues
From Vshant to the Lizart north	29 leagues
From Vshant to Silly northwest and by north	37 leagues
From Vshant to cape Cleare in Ireland northwest	84 leagues
From Vshant to the Iland of S. Michaels, southwest and by west	360 leagues
From Vshant to the cape Finisterre southsouthwest westerly	113 leagues
From Vshant to Cifarga southsouthwest	77 leagues
From Vshant to cape Prior southsouthwest	160 leagues
From Vshant to cape de pinas south	97 leagues
From Vshant to Laredo southsoutheast	113 leagues

When men sayl away south and by east from Vshant, then they run a litle without the Seames

From the Race of fontenay to the pennes southaest	9 leagues
From fontenay to Oldyarne eastsoutheast	5 leagues
From Oldyarne to the pennes southeast and by south	5 leagues
From the west end of the Seames to the pennes e. f. e. somewhat southerly	13 leagues

From the Seames to the Band or Cragge of Oleron southe. & by e.	112 leagues
From the Seames to the bayone in france southeast	112 leagues
From the Seames to S. Sebastians southeast and by south	111 leagues
From the Seames to Bilbaw southsoutheast, easterly	110 leagues
From the Seames to S. Andero southsoutheast	109 leagues
From the Seames to cape de pinas, or Tores, south	88 leagues
From the Seames to Ribadeus, south and by west	93 leagues
From the Seames to cape de Ortegall, southsouthwest southerly	90 leagues
From the Seames to cape Finisterre f.w. and by south, southerly	112 leagues
From the Seames to Silly, northnorthwest	45 leagues
From the pennes to the Glanons, the course is eastsoutheast	leagues
From Glanons to Gloyland to Groy, east and west	9 leagues
From the east end of Groy to the west end of Bell-Ile, the course is south-southeast	5 leagues
From Glanons, or Gloyland, to Bell-Ile, southeast and by east	12 leagues
From the northwest end of Bell-Ile to the southeast end, the course is southeast and by east	5 leagues
From the pennes to bell-Ile eastsoutheast	21 leagues
From the east end of bell-Ile to the east end of the Cardinall, east and by north	4 leagues

From the east point of the Cardinall, to the entring of Morbeam northnorth-west	4 leagues
From the pennes to Viverus, southsouthwest	88 leagues
From the pennes to Cifarga, southwest and by south	104 leagues
From Groy to Viverus, southwest and by south	93 leagues
From Groy to cape de Finisterre, southwest	123 leagues
From Bell-Ile to the river of Bourdeaux, southeast	50 leagues
From bell-Ile to S. Sebastians, southsoutheast southerly	80 leagues
From bell-Ile to S. Andero, south	73 leagues
From bell-Ile to cape de pinas, or Tores southsouthwest	80 leagues
From bell-Ile to cape de Ortegall, southwest	90 leagues
From bell-Ile to cape de Finisterre, southwest	123 leagues
From the east point of the Cardinall to Crofwyck, e. n. e.	5 leagues
From the point of Crofwyck to pierceperce, e.f.e.	3 leagues
From the Cardinall to Old-downes, e. n. e.	7 leagues
From the north point of the river of Nantes, to the picqueliars, e. f. e. 7 leag.	
From Pierremen to Armaniers westsouthwest	2 leagues
From Armentiers or Pickeliars to the west end of Vse, south and by east and southsoutheast at least	7 leagues
From the east end of bell-Ile to Vse, southeast easterly	16 leagues
From Vse to the Barges of Olone, east and by south	7 leagues
From Vse to the Killiathes, or S. Martens Iland, e.f.e.	12 or 13 leagues
From Vse to cape de pinas, f. w. and by south	75 leagues
From Vse to cape de Ortegall, f. w. and by w.	93 leagues
From Vse to S. Martins Iland, or the Killiathes, the course is e.f.e. 12 or 13 leag.	
From Vse to Portrush, or the Band of Oleron, the course is southeast and by east	15 or 16 leagues
From the Band or Cragge of Oleron to the Tower of Cordan f. f. e. and south and by east	13 leagues
From S. Martins Iland to the tower of Cordan, or the river of Bourdeaux, southsoutheast	16 leagues
From S. Martins Iland to cape de pinas, S. w.	80 leagues
From S. Martins Iland to Ortegall, the course is westsouthwest somewhat southerly	99 leagues

Heights.

Vshant lyeth in	48 degrees 30 minuten
The Seames lye in	48 degrees 5 minuten
The Iland bell-Ile lyeth in	47 degrees 50 minuten
The Iland Vse in	46 degrees 48 minuten
The north point of Oleron in	46 degrees 15 minuten

How these Lands doe shew themselves at Sea.

When Vshant is south and by west from you 4 leagues, it sheweth it selfe in this forme



Vshant, being south and by east from you 4 leag, sheweth it selfe thus.

When Vshant is northnortheast from you, it sheweth thus,



Vshant, being S. and by E. from you 3 leagues, sheweth it selfe thus,

Thus sheweth Vfhant, being southeast from you 4 leag.

Fontenay

Oldyearne

Vfhant, being from you 2 or 3 leagues sheweth it selfe thus.

The Pennes.

Thus sheweth the Sheets, or Slaeplakens, with pennes, as fou sayle alongft by them, and that they are about 4 leagues thwart from you.

Vfhant, being e. & by f. and e. f. e. 3 or 4 leag. from you, sheweth it selfe in this forme.

Thus sheweth Vfhant, when it is e. and by f. from you 4 or 5 leagues.

When Vfhant is 4 leagues east from you, it ariseth in this forme.

Vfhant being e. n. e. and by e. from you 5 leagues ariseth thus.

Vfhant, being e. n. e. from you 2 or 3 leagues, sheweth it selfe thus.

Vfhant being eastnortheast and by east from you, so farre as you may even see it from below, ariseth in this forme.

Vfhant being n. e. and by e. 3 or 4 leagues from you, sheweth it selfe, as is here demonstrated.

Thus sheweth the land of Glanons, when you sayle alongft by it.

The land to the eastwards of Gloyland or Glanons sheweth thus, when you sayle alongft by it.

Thus sheweth the west point of Groy, when it is 3 or 4 leagues northeast from you.

When the Tower of the Iland S. Marten is f. e. 3 leagues from you, then the land sheweth thus.

When Groy is northnortheast from you 4 leag. it sheweth thus.

Thus ariseth bell-ile, when the n. w. end is east from you 4 leag.

When bell-ile is northeast from you 4 leagues, it sheweth thus.

When the northwest point of bell-ile is east and by north from you 4 leagues, and the southeast point is east and by south, and east fourcast, then it sheweth thus: when as you sayle towards it, and you come neare the land, then the peeces which lye of from the northwest end, at last come to be fast unto bell-ile.

Heys, being southeast and by south from you, that a man may see it from the Compagne, sheweth out of the Marffe thus.

Heys, being northeast from you, sheweth thus.

Thus sheweth the land Vfe or Heys, when you saile alongft by it, being two leagues of from it.

Olone.

Heys being e. f. e. from you, and that a man may see the tower from the Compagne sheweth thus; and you are then upon 3 fathom depth.

Thus sheweth the land of Poictou betwixt Heys and the Ilands of S. Martens, when you sayle alongft by it 4 leagues a seaboard the land.

This coast lyeth southsoutheast.

Thus sheweth the west end of the Ilands of S. Martens.

This belongeth to the former figure from the west end of S. Martens Iland, and sheweth it selfe thus, when the steeple is east and by south from you 3 or 4 leagues of, the coast lyeth here eastsoutheast, and westnorthwest.

La fos de Loys.

S. Marten.

Abbey.

S. Iohn.

When S. Martens Iland is north and by east from you it sheweth it selfe thus.

S. Martens.

When men sayle out or in at Porthus, S. Martens Iland sheweth it selfe in this forme.

S. Maria.

Thus sheweth the south side of S. Martens Iland, when the Tower or west end is north, and the east end northeast three or foure leagues of from you.

The west point of Oleron, or Olderdon, sheweth it selfe thus, when it is east from you two great leagues, Thereabout it is twenty fathom deepe.

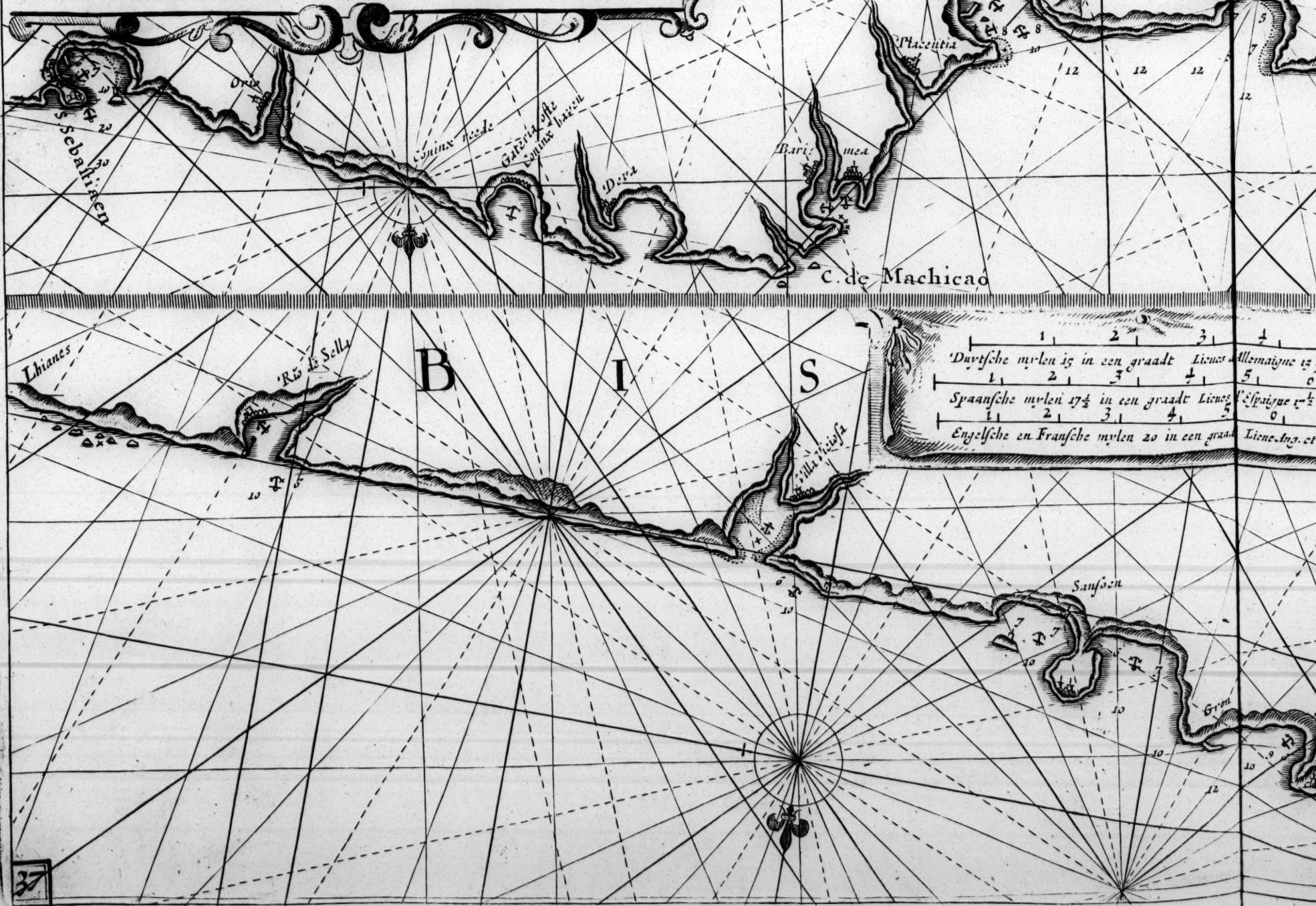
Olderdon

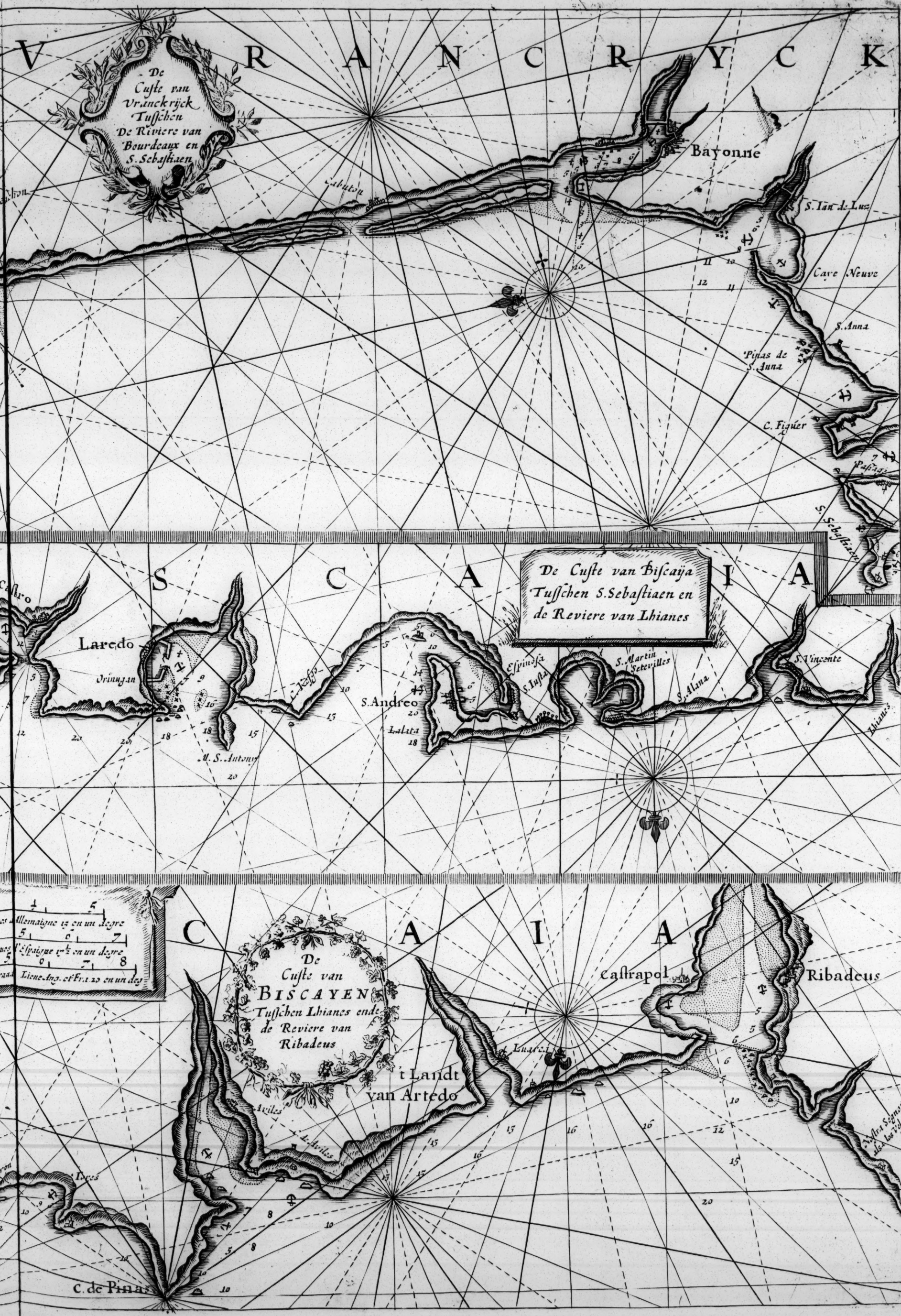
1	2	3	4	5	6
Duytsche mylen 15 in een graadt			Lienes d'Allemagne 15 en un degre		
1	2	3	4	5	6
Spaansche mylen 17½ in een graadt			Lienes d'Espagne 17½ en un degre		
1	2	3	4	5	6
Engelsche en Fransche mylen 20 in een graadt			Lienes Angl. et Franc. 20 en un degre		
1	2	3	4	5	6

Costez de France
e de Biscayen
depuis la Riviere
de Bourdeaux jus-
ques a Ribadeux

Rivier van Bourdeaux

1	2	3	4	5	6	7	8
Duytsche mylen 15 in een graadt				Lienes d'Allemagne 15 en un degre			
1	2	3	4	5	6	7	8
Spaansche mylen 17½ in een graadt				Lienes d'Espagne 17½ en un degre			
1	2	3	4	5	6	7	8
Engelsche en Fransche mylen 20 in een graadt				Lienes Angl. et Franc. 20 en un degre			
1	2	3	4	5	6	7	8





V R A N C R Y C K

De
Custe van
Vranckrijk
Tusschen
De Riviere van
Bourdeaux en
S. Sebastiaen

Bayonne

S. Ian de Luz

Caye Neuve

S. Anna

Pinas de
S. Anna

C. Fiquier

Papiray

S. Sebastiaen

S

C

A

I

A

De Custe van Biscaya
Tusschen S. Sebastiaen en
de Riviere van Lhianes

Laredo

Orreaga

S. Andree

Lalata

S. Iusta

S. Martin
Sebevilles

S. Alana

S. Vincente

Lhianes

C

A

I

A

De
Custe van
BISCAYEN
Tusschen Lhianes ende
de Riviere van
Ribadeus

Castropol

Ribadeus

t Landt
van Artedo

C. de Pinas

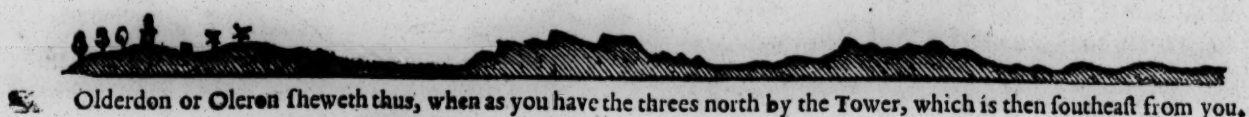
Pipe

North
and for
ther A

Roya

Down.

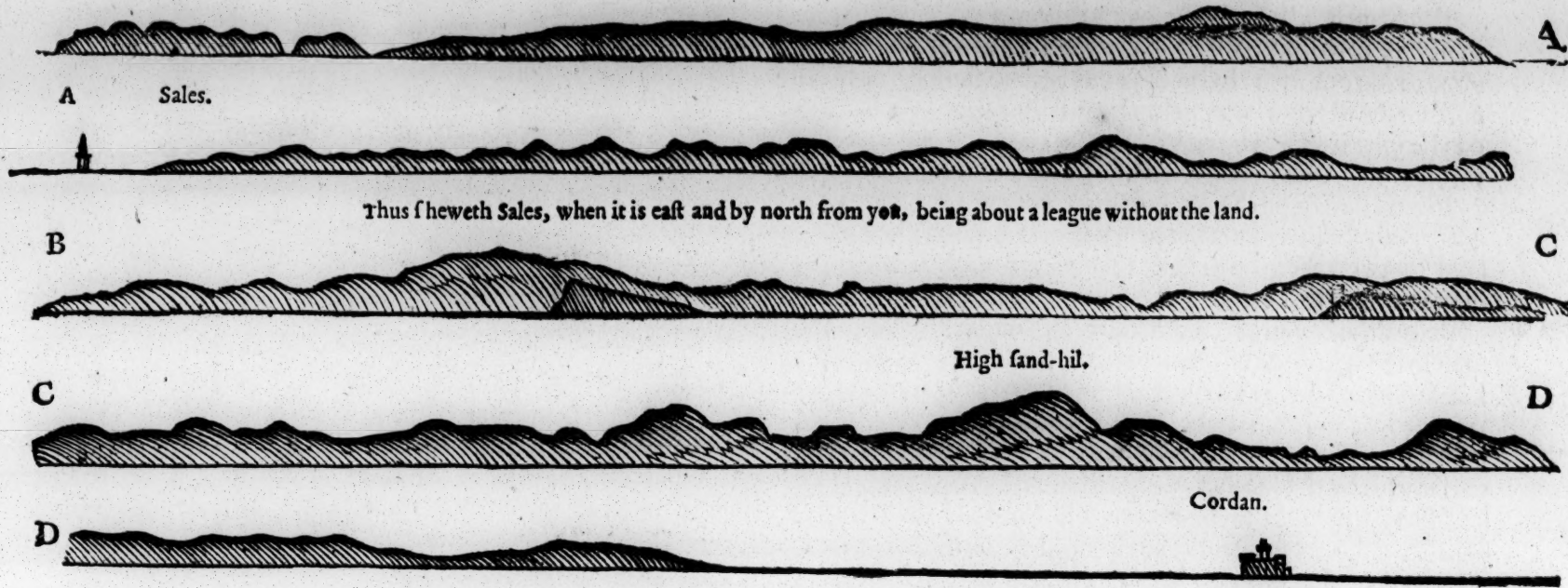
Downyland.



Olderdon or Oleron sheweth thus, when as you have the threes north by the Tower, which is then southeast from you.

When you are before Porthus, about two or three leag. from land, then doth Oleron and Olderdon arise in this forme. The land betwixt Olderdon and the river of Bordeaux sheweth (when men sayle alongst by it) as is portrayed in these five following figures, the letters of one fort belong one to the other, as AA, BB, CC, DD.

The Island Olderdon.



The second demonstration,

Which containeth the description off the River off Bordeaux to Ribadeaux.

FROM the Band of Craghe of Oleron to the Tower of Cordan, or the Pole head, or the mouth of the River of Bordeaux, called the Garrone, the land lyeth south-east, and southeast and by east 13 leagues.

To the northwards of the mouth of the river of Bourdeaux, lye five or six high white Sand-hilles, but to the southwards of it, it is somewhat low land, blacke litle Sand-hilles, being growne with spiry grasse.

From the Tower of Cordan of the northwards, towards the high Sand-hilles, vvhich lye upon the north land lyeth a sand-banke, called the Piper, men may sound alongst by it on the west side in seven fathom, but upon the northend is very sleepe, and not farre of it is twenty fathom deepe.

From the north point of the River runneth of to the southwards, a sand called the norther Affes, and to the southwards of it lyeth another sand, called the souther Affes, thorow betwixt them both, and also alongst to the southwards of them, men may saile into the River.

If you will saile into the River comming from the northwards, then you may run alongst by the shore in 12 and 13 fathom, untill that the Tower of Cordan stand southeast and by east from you, runne then right in with it, through betwixt the norther and souther Affes, untill that the high white sand-hil upon the north point of the River stand northnortheast from you, men may so (comming from the northwards) runne in also about by the norther Affes, by your lead, untill that the Tower come to be southsoutheast, and southeast and by south from you, then goe towards the Tower, and when the foresayd high sand-hil come to be northnortheast or northeast and by north from you, sayle then right in with it, untill that you have the sounding of the land, run then in alongst by it, towards Messie, that is the point where all the mills stand. When you shall saile thus tovards the high sand-hill, and that the Tower of Soulack commeth a great fathom to the northwards of the Towver of Cordan, and the litle mill of Royan then are you also past the Piper, and may run in right east vvithout feare tovards Royan, but you must reckon well your tyde, for the flood falleth thwart over the Affes towards the Towver of Cordan, and the ebbe in the contrary.

In this foresayd channell through betwixt the Affes remaineth at low vvater 3 fathom water upon the shoulde.

For to sayl into the river alongst to the southvards of the Affes, comming from the northvards, (that is, the best channell) you must do thus: Bring the Tower of Soulacke east from you, or somewhat more northerly, and saile in so right vvith it, untill the towver of Cordan be north and by east, and north-northeast from you, Royan shall then stand northeast from

you, or else if you come from the southvards, then bring the towver of Cordan north and by east, and n. n. e. from you, and sayle in so right with it, untill Soulack come to be east from you, Royan shall then stand N. east from you, saile then right towards it, and comming neare it, saile to the point of Messie.

When you are novv vvithin the Rivers mouth, and come right against the point of Messie, that is the point vvhere the Mills stand upon, then edge over towards the broken Castle, called Chastillion, f. e. and by south, that is, eight leagues from Messie, and then forth in alongst by the south land, southeast in unto Pouliack, which is two great leagues.

In the farevvay betwixt the Piper and the point with the Mills, or Messie, it is 10, 11, and 12 fathom deepe, but out of the fareway, either on the north side, or south side, it is shouldey to wit, 5, 6, 7, and 8 fathom, you must runne alongst close by the point of Messie, there it is 22 fathom deep.

When as that Royan commeth to the west point, where-upon the mills stand, keep it so standing, and go away southeast and by south towards Chastillion, it is in this fareway allmost all alongst 5 fathom deep, but comming neare the north or south side, it is shouldey, and at the north side it is full of sands, where also men may vvel saile through that are acquainted.

From Chastillion to Pouliack it is 2 great leagues S. east, the course is as before is said, and it is there deep 4, 5, 6, & 7 fathom. Over against Pouliack in the midst of the River lieth a litle Island to the eastwards, men must runne about it, right in with Bloy, but there men must goe over with the tyde, for it is there at low vvater but a litle more then one fathom deep.

When you are before Pouliack, and wil saile to Bloye, then let the vvater first flow an houre, and then you may vvell goe over with a ship that draweth nine or ten foote vvater. The markes for to saile alongst in the deepest water of this reach, are these: there standeth a mill halfe wayes betwixt Bloye and Rocktaw, keepe that without the new wall of Bloye, and then you shall run in the deepest of the Channell.

Before Bloye it is againe three or foure fathom deepe, runne then alongst by the north land in three, foure, and five fathom. When you come before the River vvich lieth up to the eastvards called Dordoigne, then sayle first right vvith the middest off the second Island, and leave it on the star-board side, and go indifferent neare alongst by it, untill that you be over against or past the Gollowes, which standeth upon the east poynt off the River: and then againe alongst by the northland unto the foure litle houses. From thence you must edge over to the high Tower of Dublot or Pigeonhouses, comming thwart of it, you must presently edge over againe to the east side, to the hight neare Lermond, in that

The pace

that edging over, you shall runne through betwixt a stone banke on the larboard side and a shold sand-plate on the starboard side, over a banke called the Pace, which is the shouldiest of all the river, there remaineth at low water a litle lesse then a fathom. Being come over the Pace to the east side, goe then in alongst by the east shore, untill you be past Lermont, then saile againe over to the west side, right with the houses of Charterhouse, and then in all alongst by the west shore, untill you come before the towne of Bordeaux, in that crooked reach betwixt Larmond and Charterhouse it is 5, 6, and 7 fathom deep, and before the town 4 and 5 fathom.

When men will sayle out of the river of Burdeaux, they must stay at Royan untill they have good weather, and a forebbe to run out with: in running out, keepe the high sand-hill northnortheast from you, so long untill that the tower of Cordan be southeast and by east from you, then you may sayle out through the Asses northwest and by west into sea.

Arcachon.

From Cordan, or the river of Burdeaux, unto Arcachon, the coast lieth south and north twenty leagues, it is all low sandy land, betwixt them both lieth a tyde-haven called Anchises, men may goe in there well at high water with great ships.

Before the haven of Arcachon, or Arcason, lie three showlds, men may sayle into the northwards of them, and also into the southwards of them: the norther entry goeth in betwixt the north poynt and the northermost showld, but it is narrow and not deep. The souther entrey lieth to the southwards of all the showlds by the souther poynt, in betwixt two showldy sand-bankes, whereof the one lieth off from the southermost showld, and the other from the south poynt of the maine land, southwest and by west into sea. The land to the northwards of this haven is altogether somewhat low sandy land without trees, but to the southwards of it there are all somewhat high sand-hills without trees also, but comming before the havens mouth, you shall see within in the land many trees. When you come out of the sea either from the northwards or the southwards, neare about this havens mouth, you shall easily espy the foresaid bankes on both sides of the souther entrey, by the breaking of the sea, and you may borrow of them by your lead, as neare as you please, they are very cleane and flat. Upon the sandhills within the havens mouth, stand two great high masts. If you will sayle in there, then bring the two Masts one in the other, and then they shall stand northeast and by east from you, keepe them one in the other, and sayle in so right with them, and you shall so sayle in betwixt the two foresayd bankes, and at low water you shall not finde lesse then two fathom water, but at high water you shall have five and a halfe, and sixe fathom water, go in so upon the markes, untill you come within the showlds, and to the end of the showld-sand on the larboard side. Being gotten in within it, you must luffe up about by it; and goe then on north untill you come to the point, which you shall see on the starboard side, but give that a birth, because there runneth off a tayle, there is in that reach no lesse then ten, eleven, or twelve fathom deep. Being come about that point, you may then saile in close alongst by the land on the starboard side, which lieth east southeast, or you may anchor there in sixteen, fifteen, twelve and ten fathom, or further in about the second poynt, in two and three fathom. Over against the first point, on the north side, it falleth very far dry, a great waies within.

For to sail into the haven of Arcason.

bayone

From Arcason to Bayone, the coast lieth south and north sixteen or seventene leagues. The Rivers mouth of Bayone lieth in betwixt two plaine strands eastsoutheast, and east and by south, and sometimes more easterly or northerly, by reason of the shifting and altering of the sands before the Rivers mouth. Upon the land on the south side of the channel, stand two masts, these you must keepe one in the other, or the innermost a litle to the northwards of the outermost, and run so in over the Barre or showldiest place, untill you come against the south point, and then in alongst by it. Upon the foresaid Barre is at high water and Spring tyde, at least three fathom, with an ordinary tyde two fathom and a halfe, but at low water no more then 3 foot water. When you come about the point, you must saile up to the southwards, keeping about the middle of the channell alongst the river, or rather nearest the west side, for to avoid some foule ground and showlds, that lie on the east side, and anchor before the town in 4, 5, or 6 fathom. This Bar and this River is Pilots water.

A litle within this Barre on the north side of the river lieth up to the northwards a great water within, of 7 leagues long, and falleth out into Sea by Cabritton. Alongst that great water the ships were wont to saile up to Bayone, but it is now upon the south end at the river of Bayone almost altogether paled too, so that there can but small barkes goe through, for

to keepe the better the Barre of Bayone deepe with scowring through of the water.

From the Barre of Bayone to S. John de Luz, the course is south and by west 4 leagues, there is a faire Bay where men may ride in five, sixe seven or eight fathom, according as they will lye farre in, cleane sandy ground, at the end of the Bay is a litle tyde-haven, where upon lieth the towne on the west side. At high water, and with an ordinary tyde there cometh nine foote, but with a spring twelve foote water, at low water it falleth altogether dry, so that men may goe over there with drie feete. A litle within the west point of the Bay is also a litle Dock, where there is a foot water more then in the foresaid tyde-haven, but it falleth also dry at low water.

This Bay is very good to know by these marks that hereafter are written: It lieth right in the Bight, to the eastwards of it lieth the land north and by east towards Bayone, and to the westwardes of it the land falleth away southwest and by west, and southwest towards Fonteravia. Upon the east point of the Bay standeth a white Fire-tower which men may see farre off, especially when the Sunne shineth upon it, then it shineth very white more then the other land. Upon the west point standeth a flat white house a litle wayes upon the high land, and to the westwards of the Bay it is upon the sea side gray and blewish land. Also the high hill of S. John de Luz, is a good marke for to know this Bay, which remaineth in sayling in, lye somewhat to the eastwardes, or on the larboard side. This foresaid hill of S. John de Luz sheweth it selfe out in height above all other hilles thereabouts, and thereby is very good to be knowne: above upon the top it is somewhat flat, as is demonstrated in the rising of the lands. Upon this foresaid hill standeth a Chappell, from whence men may see into foure Kingdomes: France, Spaine, Navarre and Arragon.

About two leagues southwest and southwest and by west from S. John de Luz, lye the rocks called the Fignons of S. Anna, not farre from land: a league to the westwards of them, lieth the Bay of Fonteravia, being a faire Bay. Pignons of S. Anna

At the west point of the Bay lieth the C. Figuer, a high point, upon it standeth a castle, an to the southwards of it a litle chappell. At the point of this cape lieth a rock a litle wayes from it, but the sea cannot run through betwixt them, except it be with very high floods, it breaketh a litle through. At the east side of this bay lie two high rocks, and thwart of them lie also some low rocks a good wayes off from the land. For to avoid them you must saile in by the west point for to come into this Bay, and being within it, you may anchor in eight or nine fathom, but so that the foresaid great rock at the C. Figuer stand north n. w. from you, there you lie in faire sandy ground, and landlockt for a northwest winde. The Kroonenbergh. Kroonenbergh.

A litle league to the westwards of C. de Figuer, lieth Passage also a faire haven. At the west side of the havens mouth, which is verry narrow, lieth a round rock, so that it is evill to come in there with an ebb, but with a flood it is better, without it is very cleane, without any showlds or fowle grounds but onely the foresaid rounde rocke. The towne lieth a litle within the haven on the west side, where men doe lie before it in 7 fathom. Passage.

Two great leagues to the westwards of Passage, lieth S. Sebastians, betwixt both is also a sand-bay in a bight, where S. Sebastians. there goeth up into the land a showld litle river, where come in many Barkes.

The haven of Saint Sebastians is good for to come into, men doe runne in there betwixt two litle castles, where of the eastermost is te great, standing upon a high hill. The westernmost is a litle square tower, and lieth upon a litle Iland, or rock. In the havens mouth being narrow, betwixt the two foresaid litle Castles, lieth a rocke, which at low water is sixe fathom deepe, and when it is a storme out of the sea, it breaket allwayes upon it, and lieth neereft the east-land, by the west-land it is deepten fathom. Now for to avoid the foresaid rocke in comming in, there commeth an Abbey to the eastwards of the westernmost Iland, and a litle Tower. If you keepe them one in the other, then you run into eastwards of it.

For to anchor without S. Sebastians in the road, you must keepe the high hill which lieth upon the point of Cape Figuer, without the foresaid eastermost castle, there you may anchor but if the same come to be hidden behind the castle or Iland, then you may not anchor in the road of Saint Sebastians. When you are come through the narrow within the rock and the castles, then you may anchor at the east side under the great castle, there is the best road. Within the foresaid castle

castle goeth up a little water, men may goe at low water a foot from the easter castle alongst a high strand upon the maine land, unto the Towne, which lieth behinde the foresayd high hill with the Castle, yet the strand at high water is covered; it is a bay, and within before the towne it is deepe five, fixe, and seven fathom, at the west side under the little Iland, men may not ankor, because it is flat and shold there.

He that will goe forth from thence into S. Sebastians, let him run in, keeping the middle channell, betwixt the two Ilands, and let him leave the little Iland where upon the chapel standeth on the starboard side, running in so right against the first or the second wall of the towne, and ankor there, the bots or shallops shall come aboard of him, and helpe him into the haven betwixt the walles.

A league to the westwards of S. Sebastians, lyeth a sandbay, where men may ankor so deep and so shallow as they will.

Gateria. From S. Sebastians to the C. de Martinchaco, the course is W. N. W. 13 leagues. Betwixt them both lye the roades Gateria and Deva.

Gateria lieth from S. Sebastians west and by north, and W. N. W. distant 8 leagues, being a faire round sandbay, where is good riding for westerly winds, men lye there within the west poynt right before the Towne, in faire sandy ground, a north winde commeth right from the poynt. This bay is commonly called Kings-haven.

Alongst the coast of Biscay, betwixt S. John de Luz and Gateria is every where clean ground and good anckoring in 20 fathom.

From Gateria to Deva it is a league and a halfe to the westwards; which is an off-water that cometh out of the high land.

Two leagues to the westwardes lieth the poynt of Cape Martinchaco.

Barme. About thirteene leagues westnorthwest from S. Sebastians, lyeth the Cape de Martinchaco, a litle to the westwardes of it is a good tyde-haven, where in lieth a litle Towne about a league within the land, upon a river which commeth out of the high land. A litle to the westwards of Cape de Martinchaco, lieth a great rock fast the land, and a litle to the westwards of the same, another: upon the point called Punte de A villanes. Southwest and by west from Martinchaco lyeth the haven of Barme, a faire great Bay, the easter poynt is foule, therefore men must give it a good birth, and run in alongst by the west side, when they are gotten in it is large enough, there they may ankor where they will.

Placentia. To the westwards of Barme, lieth also Placentia upon a litle River, the towne lyeth a litle within the land. There are all tyde-haven.

From Cape de Martinchaco to Bilbao, (where betwixt lye the foresaid havens of Barme Placentia) it is southsouthwest and southwest and by south 7 leagues.

Bilbao. From Placentia to Bilbao it is two leagues westsouthwest and west and by south. Bilbao lieth upon a great river, alongst which there commeth of much Iron, it is a good haven, but it lieth not farre in, by reason of the Barre which lieth thwart over the haven, where men must goe in with high water.

At the east poynt of Bilbao shooteth off a riffe, which men must avoyd, there lye also some rockes under water. It is a high steepe poynt, and is white to see to.

Within the riffe that runneth off from the poynt, men may ankor in seven and eight fathom; betwixt the poynt and the Piere on the east side, there the Pilotes come off which bring up the shippes; and there men may lye land-lockt for a north west winde. From this foresayd poynt or road to the Barre or river mouth of Bilbao, it is a league and a halfe south and by west, which lieth in by the west land, there standeth five or fixe houses upon the west land, when the two westermost house come one in the other, or when you may se through the two eastermost houses, which stand within in the land, then are you upon the Bar or shold, then goe in south, and south and by east right with the Castle Portugaletto, and alongst close by the Castle, and ankor a litle within the Castle for a west winde. But when you are before the Barre, the Pilotes come off and bring you to the Town.

When you lye without in the Bay, then you may see Mount Anthony lie west and by north from you.

Castro. From the poynt of Bilboa to Castro, the course is west five leagues, that is a good haven for fixe, seven, and eight fathom depth. The narrow of the haven lieth in south, in 10 fathom. But further in the river towards the towne, it is not deeper then 3 or 4 fathom.

S. Antony. From Bilbao to the hill of S. Anthonies, it is west and by north nine or ten leagues. From Castro to Laredo, the course is west distant five leagues, upon the west side lieth the fore-

said hil of S. Anthonies, which is a high hill men may saile in close alongst by it, untill they come about the east poynt; within it is wide and broad, and a fit haven for great shippes, there men may ankor in seven or eight fathom. To the eastwards over against the hill of S. Anthonies, in the midst of the sound, lyeth a rane of rockes under water, where men may sayle in about it on both sides, men may easily espy them, because it doth alwaies breake upon them, within them is the road for ordinary shippes, a litle before the haven, which is built with a wall: but the great shippes lye a litle further off in 6 or 7 fathom depth. On the south side of the haven is a litle tyde-haven, from the same there commeth a great riffe shooting off from the east side, towards the hill of S. Anthonies, within it is two fathom water right before the village, from the village commeth a tayle of sand, lying thwart out, within it at low water it is a fathom deepe. In the midst of the sound it is nine fathom, and at the poynt of Saint Anthonies 20 fathom deep.

From S. Anthonies hill to Cape de Kefgo it is west and W. C. Kefgo: and by south two leagues, that is a great Cape lying to the eastwards of S. Andero: thwart of it is clean ground.

From Cape de Kefgo to the west poynt of S. Andero, it is west and by south five leagues, a litle to the southwards of the poynt of S. Andero, upon the east poynt of Sardinis, is a sandbay, there is good anckoring in ten fathom.

From C. de Kefgo to the haven of S. Andero, the course is S. Andero W. S. W. distant 2 great leagues. S. Andero lieth within a Bay, there lieth an Iland before the haven, men may goe about it on both sides, it is deepe 8 and 9 fathom; but to the southward of the Iland it is deep, 5, 6, and 7 fathom, according as men will come neare to the strand, the haven lieth in first W. N. west. The Iland lieth a great league within the bay: from the east point of the haven, unto the west point of the land, it is south and north about a great league. S. Anthonies and the west point of S. Andero lie one from the other east and west, about 5 leagues.

For to know the land when you fall with the land about La-Laredo.

redo, you must know that on the west side of the haven of Laredo, lieth the hill of Saint Anthonies, which is a very high hill which men may see very farre from the east and the west, and a litle above the towne of Laredo, men may see also a sharpe hill like the point of Diamont; or the point of a two hand sword, further it is about Daredo very high double land, two, three, and at some places foure double. The hill of S. Anthonies doth arise in two high hommocks, with a valley or fiddle in the midst betwixt them both, within in the land lie also two high hills with sharpe toppes. Above and to the wards of S. Anthonies, lieth a piece of land about two leagues long by judgement, which lieth in five hills, the eastermost is the lowest, and rise all higher & higher towards the west, so that at the last to the vvestermost is the highest, which goeth off somewhat flat downwards towards the vvest. Betwixt that eastermost hill & S. Anthonies, lieth a bay about a league long, called the Bay of Port, men cannot see these foresaid hills when they are close by the land, but they must be a good Wayes off to seawards. To the westwards of these foresaid hills lieth an other peece of land vwich at the east end is highest, and goeth sloping off towards the west end, almost like Portland. Betwixt that point and the five foresaid hills, lieth an other sandbay, where abouts stand some litle houses, but by it lie many rockes and fowle ground. Thereabouts within the land lieth the foresaid high round sharpe hill in forme like the point of a sword.

S. Andero hach but fevv hills that are good to be know, but vwhen men are before the haven, then they shal see to the eastwards of the towne, a Castir upon a high hill, in forme like a Sugarloafe, or abey-crock, and to the eastwards of it is much double land of two and three height double. But vwhen men come about the Cape de Kefgo, then they shall see presently the castle upon the West land.

From S. Andero to Capede Pinas, the course is West or a litle more Northerly 38 or 39 leagues. Betwixt them both ly these havens following.

First the haven of S. Martin, or Settevilles, a tyde-haven lying east and West 4 leagues from S. Andero.

From thence to S. Vincent also a tyde-haven is five leagues distant: the haven goeth in on the east side; from the West side commeth shooting off a litle river, and in the midst of the havens mouth lyet a litle Iland, vwhere men may goe in on both sides.

From S. Vincent to Lhanes, a tyde-haven, the course is W. 2 or 3 leagues. Upon the vvest side of the haven standeth a litle Church: and a litle vwithin the haven, lyeth a middle plate

plate or sand, men must go in on the west side of the land: these are all narrow havens, and but little knowne.

From Lhanes to Rio de Sella, the course is west 5 or 6 leagues: betwixt them both lie alongst the coast many rocks, and within them many sand-bayes, where men for need might save ships,

Rio de Sella.

Hee that will goe into Rio de Sella must looke out for a mast which stands upon the east land close by the same men must goe in, the west side is within foule, within the mast men must anchor before the villagie, this is also a tyde-haven.

From Rio de Sella to Villa Vitiosa, it is west, 9 leagues, this is also a tyde-haven, but is clean, the havens mouth lieth in S.S.E. and southeast and by south close alongst by the west point of the land, the east side is fowle unto the middest of the haven: there lieth a rock with a plate right in the midst of the haven, which a low water falleth dry: so soon as men are within that rock, they must anchor within the rock; upon the west side lieth the towne, men may also sayle up to it, and anchor there in the showld water.

Sanfon.

Seven leagues to the westwards of Villa Vitiosa lieth the out-poynt of Sanfon, to the eastwards of it lyeth a little Iland, where upon standeth a little Tower. Betwixt Sanfon and the foresayd little Iland is a good road in six or seven fathom.

At the west side of Sanfon is also a good road right before the little haven of Sanfon in 6 or 7 fathom.

Gion.

To the westwardes of Sanfon lieth Gion with a Piere or Head that is paled off, under the which the Fishermen which dwel there, lay their barkes.

Tores.

A great league to the westwards of Gion lieth the Bay of Tores, a good road for a southwest and west wind in 8 and 9 fathom. Upon the poynt standeth a high tower.

C. de pinas.

Three leagues to the westwards of Tores lieth Cape de Pinas, where many rockes lye of to seawards, a least a halfe league of, some doe say that men may sayle through betwixt the poynt and these rockes.

From the cape de Pinas lieth off a rane of rockes, lying at the least a halfe league into sea, some say that men may sayle through betwixt the poynt and these rocks. But a little within or to the westwards off the Cape de Pinas, lieth a great rock, betwixt that rocke and the land men may sayle through.

When men are within the Cape de Pinas, then lyeth Avilles three leagues from thence southsouthwest which is a good tyde-haven, where a great shippe may goe in at halfe flood, also there is a good road before this haven in 6 and 7 fathom.

Avillis.

For to sayle in there, men must goe in by the aeft land, the west-land is farre off showld, there standeth a little Chappell upon the east-land, men must sayle in close by it, and anchor a litle wayes within two rockes that lye on the east side, a litle within the havens mouth. The towne lieth a league further up. From the west poynt runneth off a riffe, and lyeth inwards alongst the haven, towards the town, so that it is there very showld on both sides. On the west side without the haven in the bight, lie two great rockes right before the little Church in the Sand-bay, men sayle round about them, but it is not very cleane: but without the rocks is good anchor ground in 7 or 8 fathom, over against the little Church that standeth against the high land.

Luarca.

From Avilles to Luarca is 6 leagues and from Luarca to Ribadeus W.S.W. 6 leagues, and from Avilles to Ribadeus S.W. and by west 12 leagues.

Ribadeus.

From the east poynt of the havens mouth of Ribadeus, lieth off a ledge or riffe off rocks towards the west shoare, you may found in about it in foure fathom, or foure fathom and a halfe: or else if you keepe the little towne Castropoll even without the poynt, and so sayle right in with it, then you shall not come to neere the foresayd ledge, but you shall sayl far enough alongst to the w. wards off it. The west poynt sheweth it selfe when you come in out of the sea, like an Iland; upon it at the north end standeth a flat tower, almost like the tower in the Groyne, but not so great. About thwart off that Tower lieth a suncken rocke a litle wayes from the land, you must

look out for it, and take heed off it, when there commeth in any great sea, you can easily espie it by the breaking of the sea upon it, but not with smooth water at the very lowest water it commeth even with the water. The west shoare is fowle and rocky: there runneth off to the southwards of the foresaid Tower also a fowle ledge or riffe off rocks, at least halfe wayes over the havens mouth, and at the side of it you cannot use the lead. When you are past the ledge or riffe that lieth off from the east shoare, you must run in about it, and edge in somewhat to the east shoare, and sayle in alongst by it, untill that you are past, or come to the end of the foresayd ledge or riffe off rockes, which lieth off from the west shore, as soone as you shall be past it, you must luffe up about it towards the west shoare, for to give the east shoare (within the havens mouth) a birth, which is a great wayes within very flat or showld, but on the west side it is deep water. There standeth a little Tower on the west shoare a litle within the poynt, where the riffe lieth off, which you shall see when you are come within the west poynt, and run alongst by the riffe, when you get that little tower west or thwart of you, then are you at the end of the riffe, then you must sayle towards that little Tower, untill that you come to the west shoare and run in alongst by it, untill you come before the Towne, there you must lie with an anchor to seawards, and with a cable fast on the rockes.

Of the Tydes and Courses of the streames.

Like as on al the coastes of France, so also at the mouth of the river of Burdeaux, maketh high water a fourth and northeast moone.

On all the places, and before all the havens of these coast, a southwest and northeast moon maketh the highest water; but within the havens about point later, according as they lye deepe within the land, like as on the coastes off Brittain, Poictou, and Gascoigny. Men reckon here also no falling or setting of the streames. But the streames fall here thwart of and on.

Of the Depths.

The land against the River of burdeaux men may see from the poop in 30 fathom, and the Tower of Cordan in 27 fathom.

Betwixt Arcason, and S. Iohn de Luz, men may see the land in 30 fathom, when men are about bayone, they shall see Cabritton, bayone, bedert, and S. Iohn de Luz, almost all flat Towers.

Being before Passage, men may see also the point C. Figuer, and S. Sebastians, the land lyeth in there with a great bay.

About cape de Figuer lyeth a high hill, which at the southwest end is very steepe, and goeth very long sloping down towards the north.

When men are before S. Sebastians 7 or 8 leagues without the land, then it riseth somewhat long, and at the west end steep and hollow, but when men come close by the land, then it is very high and steepe.

When men are 8 leagues without S. Sebastians, then may they see the easternmost or greatest cattle upon the high hill, and also the little Iland to the westwards of it.

Courses and distances.

From Cordan to Arcason south	20 leagues
From Arcason to bayone south	16 or 17 leagues
From the Tower Gordan to cape de pinas westsouthwest somewhat southerly	25 leagues
From Arcason to bayone south	16 or 17 leagues
From bayone to saint Iohn de luz south and by west	4 leagues
From S. Iohn de luz to the pignons of S. Anna, south west and by w.	2 leagues
From S. Iohn de luz to saint Sebastians west	8 leagues
From saint Sebastians to Gateria west and by n. and w. n. w.	8 leagues
From Gateria to cape Martinchaco northwest	5 or 6 leagues
From bayone to the Seames northwest	112 leagues
From saint Sebastians to bell-ile n. n. w. somewhat northerly	80 leagues
From saint Sebastians to the Seames northwest and by north	112 leagues
The courses and distances of the places one from the other, is declared in the description.	
From cape Martinchaco to Arcason northeast easterly	28 leagues
From cape Martinchaco to Vfe, north easterly	60 leagues
From S. Andero to the Seames northnorthwest	96 leagues
From cape de pinas to the Tower of Cordan eastnortheast and northeast and by east	72 leagues
From cape de pinas to Porthus or S. Martins Iland, the course is northeast easterly	80 leagues
From cape de pinas to bell-ile, the course is northnortheast	80 leagues
From cape de pinas to the Seames north	88 leagues
From cape pinas to cabode Veilli in Ireland north and by west westerly	170 leagues

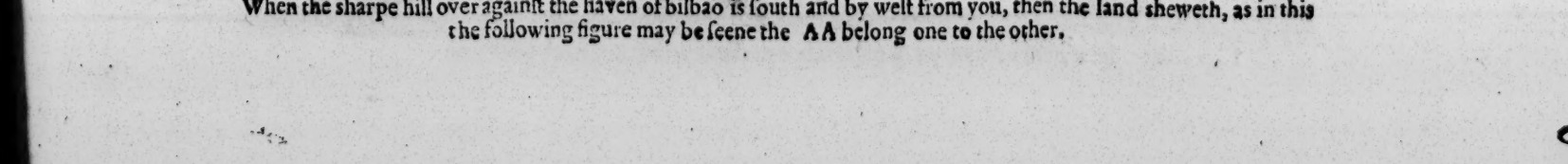
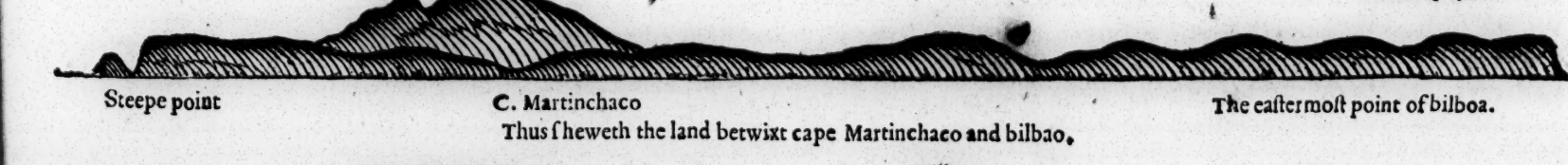
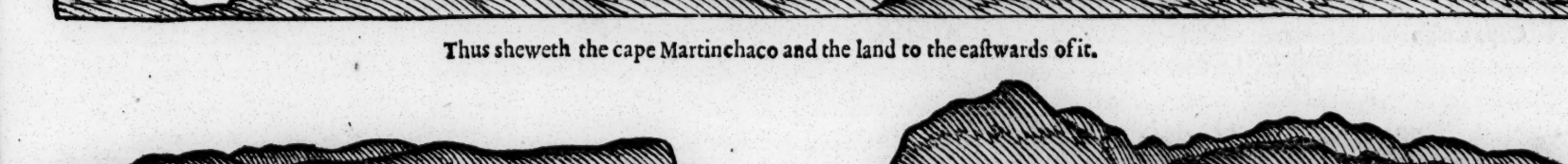
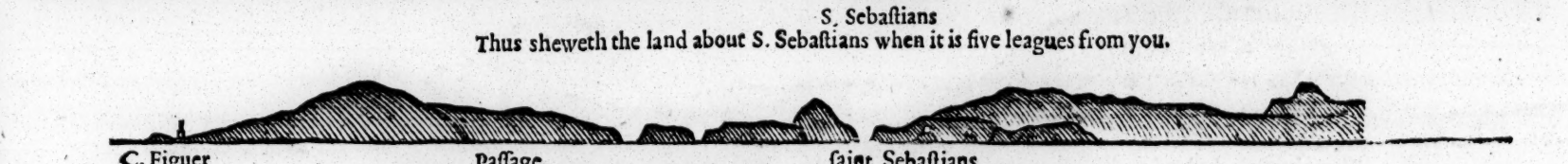
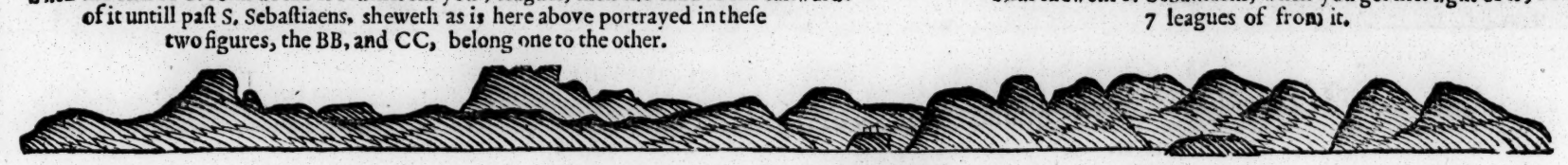
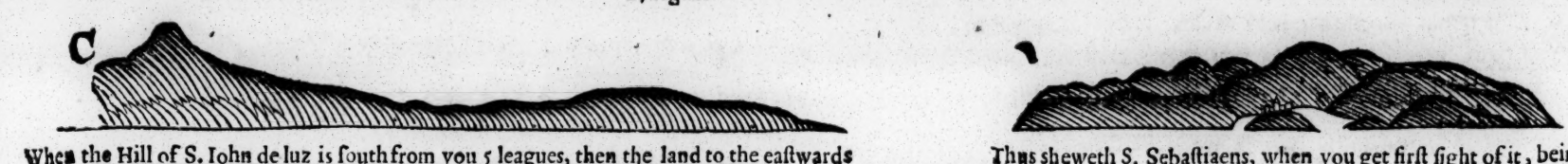
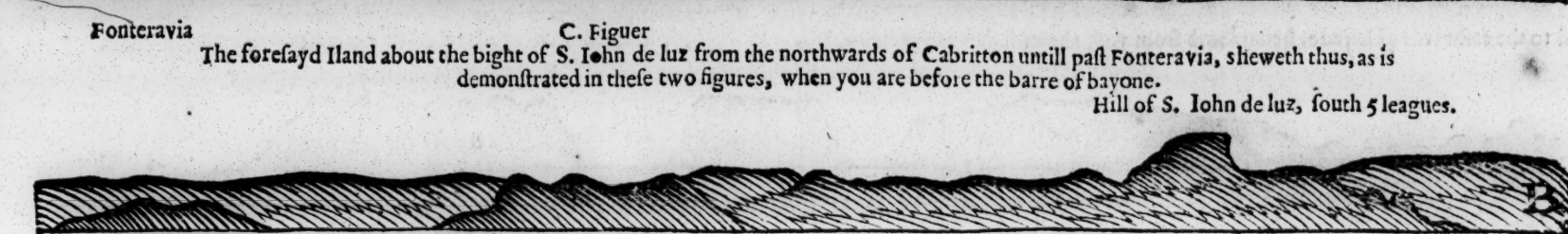
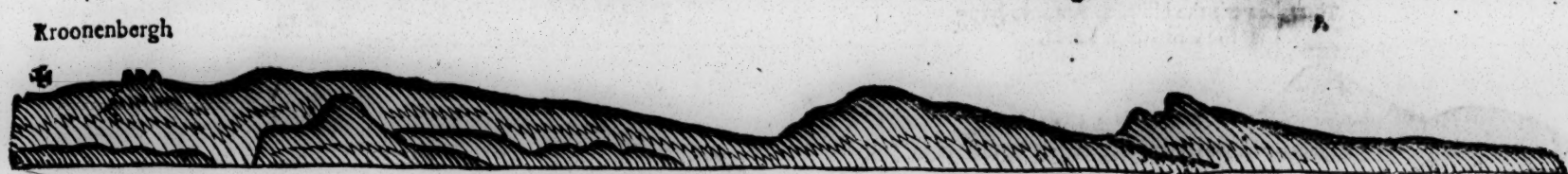
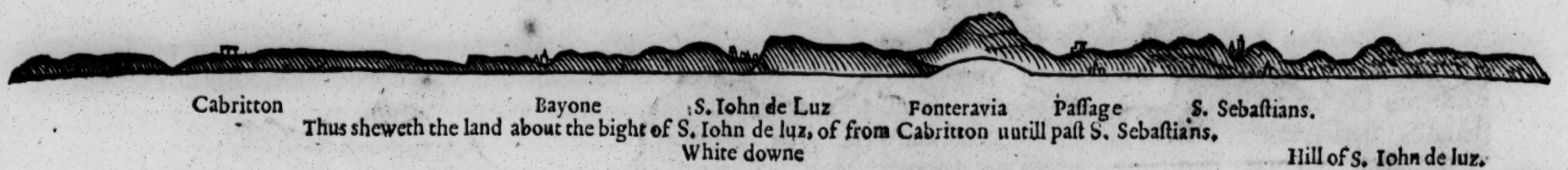
Heights.

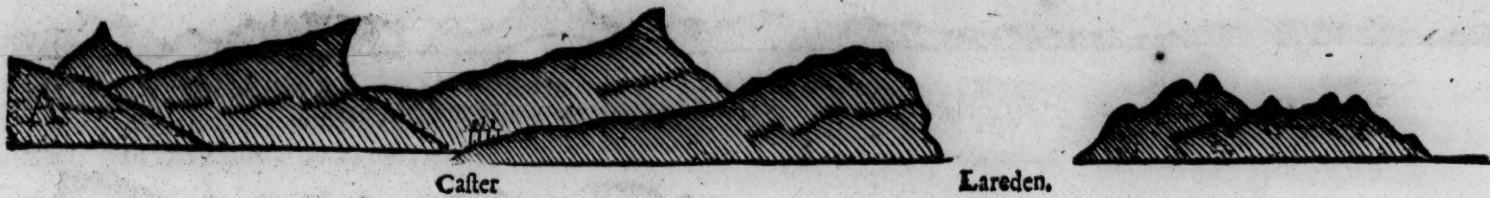
The Tower of Cordan lyeth in	45 degr. 45 minntes
Arcason in	44 degr. 40 minutes
Bayone lyeth in	43 degr. 45 minutes
The cape de Martinchaco in	43 degr. 46 minutes
The cape Martinchaco lyeth in	43 degr. 46 or 48 min:
The cape de pinas lyeth in	43 degr. 54 or 56 minnt.
The whole coast of biskaye betwixt cape de pinas and Martinchaco, lyeth in about	43 degr. and 43, 44, or 45 minnt.

How these Lands doe shew themselves at Sea.

Thus sheweth the land about Arcason when it is from you eastsoutheast neare two miles.

Thus appeareth Arcason when it is northeast and by east about two miles.





Thus sheweth the hill of S. Antonio lying at the west side of Lareda.



The hill of S. Antonio sheweth thus, when it lyeth f.f.c. from you.



The land to the eastwards of Laredo, being south from you, sheweth thus with a sharpe hill.

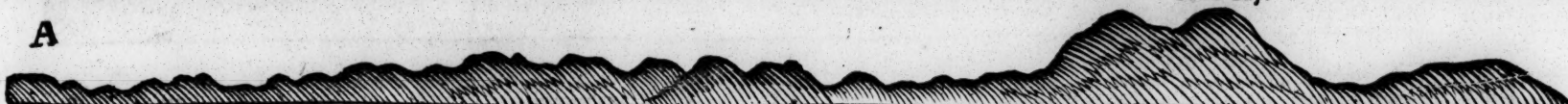


C. pinas.

Thus sheweth the land of Aviles, when you are thwart of it, S. Antoni.



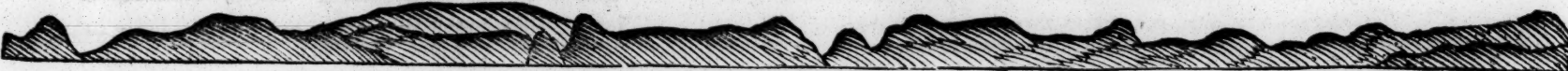
Sand-bay.



The land betwixt the westpoint of Bilbao, and cape Kesgo to the westwards of Mount S. Antonio sheweth at sea when you sayle alongft by it, as is portrayed in these two figures here above.



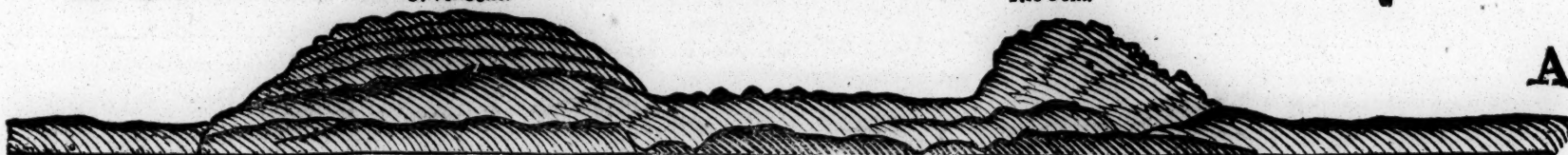
Thus sheweth the land of Biskaye betwixt Laredo and Rio de Sella, when you sayle alongft by it.



Thus sheweth the land from Rio de Sella of, to cabo de pinas, when you sayle alongft by it. These foure figures following belong one to the other, the like letters, as AA, BB, CG, one to the other, and is the coast from the eastwards of G, Vincent to C, de Pinas.

S. Vincent.

Rio Sella.



Thus sheweth the land to the eastwards of S. Vincent untill past Rio de Sella, when the hill with the three hills is foure leagues thwart from you, and Rio de Sella is 4 leagues southwest from you.



Cape Kesgo

Villa Vitiola

Sand-bay

Sand-bay.

Thus sheweth cape Kesgo, Villa Vitiola, and the land to the westwards of them, when cape Kesgo is west 4 leagues, Sanfoen, Villa Vitiola 4 or 5 leagues southsouthwest from you.



Sand-bay.

Thus sheweth the land of Biskaye, when you are thwart of Gion. This is the remainder of the three former figures, the EC being joned together.



Channel of Tores.

Thus sheweth the land when you are by Tores.

The three figures following one to the other, the like letters one to the other, and shew the rising of the land on both sides of the cape de Pinas, to wit, when the cape Pinas is about 4 leagues south, somewhat westerly, and the great hill to the eastwards of it is southeast from you.

Southeast.



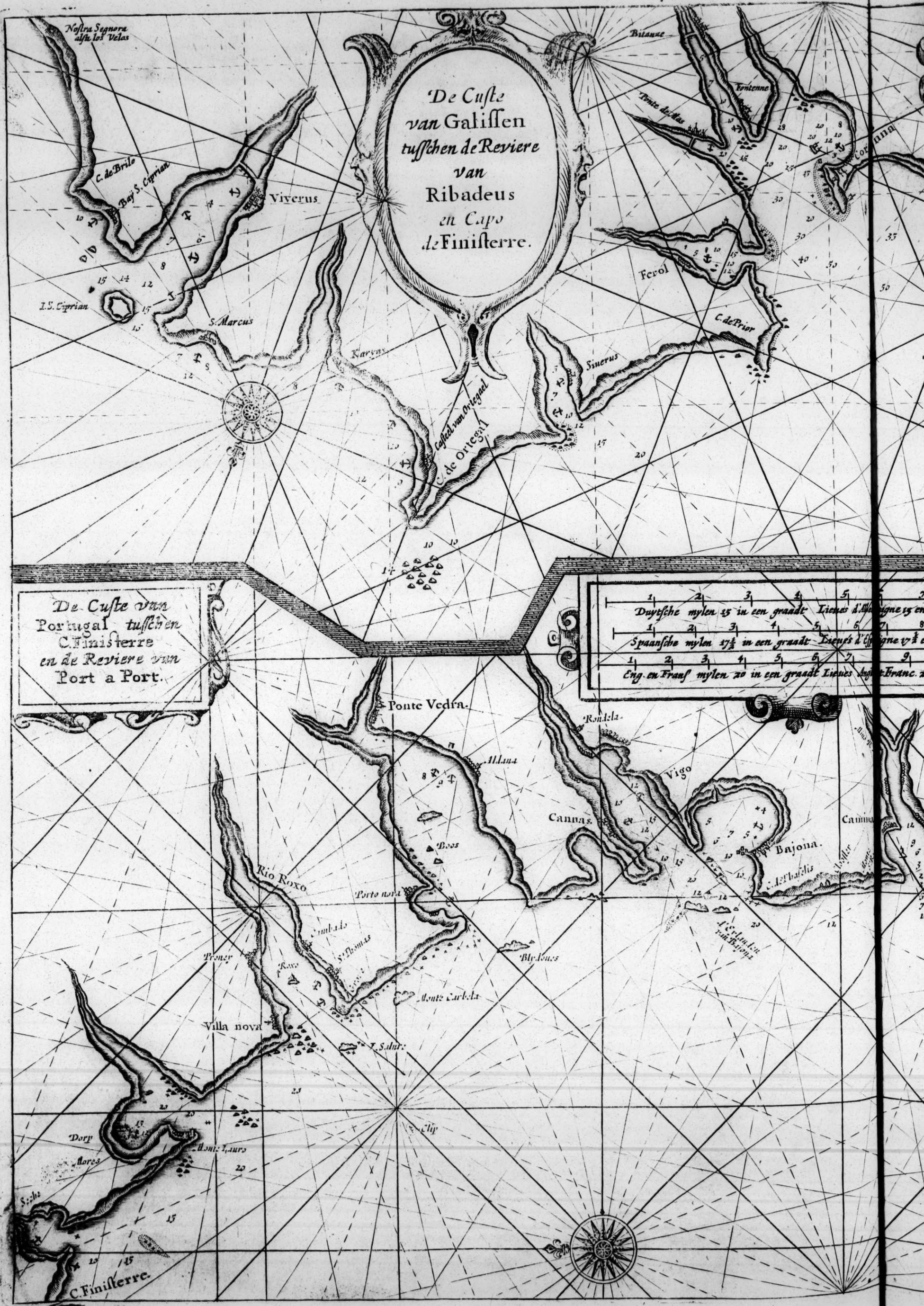
This hill lyeth most commonly covered with snow.



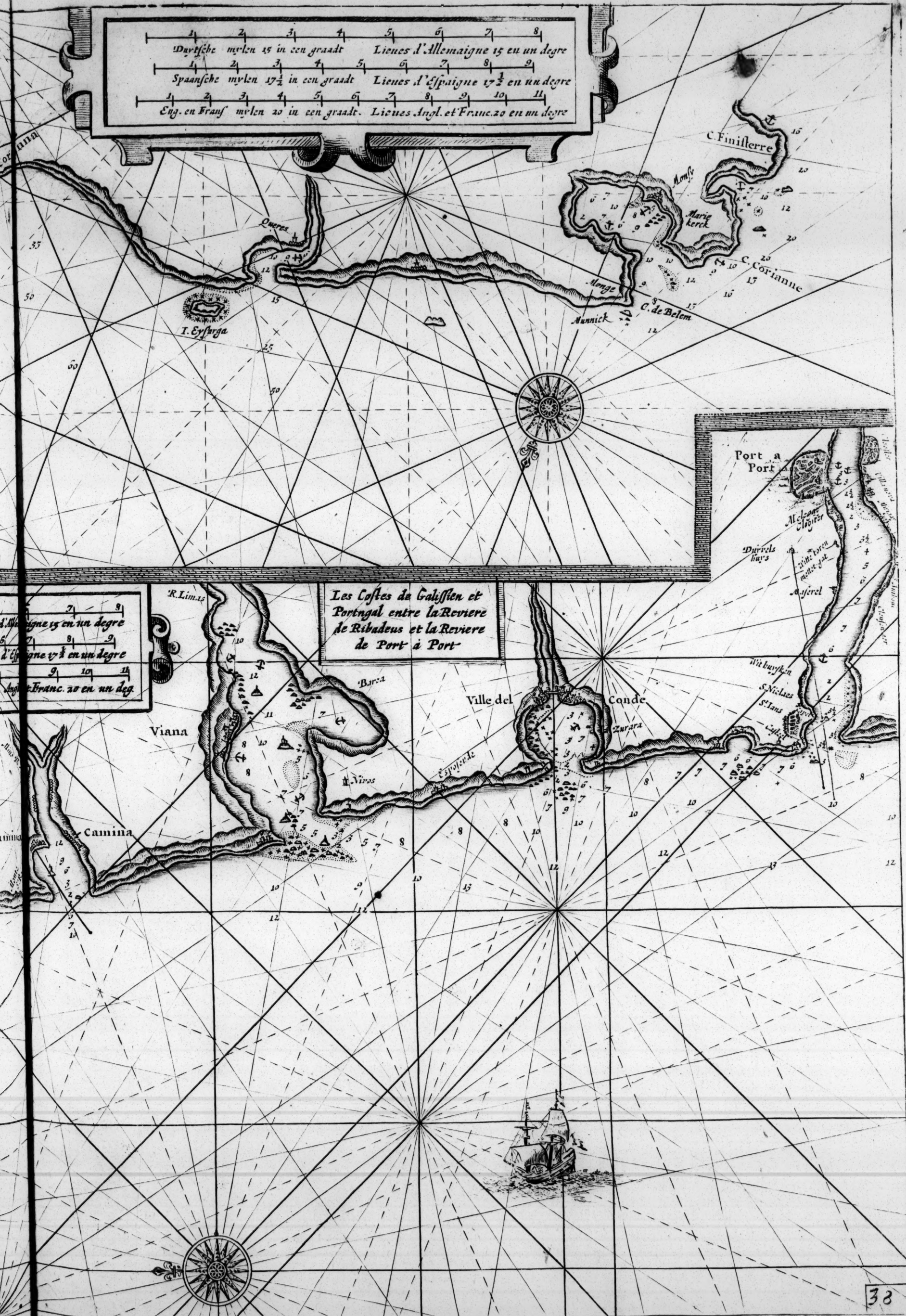
These three figures following belong one to the other, at the like letters one to the other, and shew the rising of the land betwixt cape de pinas and Ribadeux, when you sayle alongft close by the land.



Thus is the eastermost towards cape de Pinas, when the land against Z is south from you.



1	2	3	4	5	6	7	8	Duytsche mylen 15 in een graadt	Lieues d'Allemagne 15 en un degre
1	2	3	4	5	6	7	8	Spaansche mylen 17½ in een graadt	Lieues d'Espagne 17½ en un degre
1	2	3	4	5	6	7	8	Eng. en Frans mylen 20 in een graadt	Lieues Angl. et Franc. 20 en un degre



Les Costes de Galiffien et
Portugal entre la Riviere
de Ribadeus et la Riviere
de Port à Port



Thus sheweth that land against Z, being fout from you not farre of.



Ribadeus. Thus sheweth the land betwixt Luarca and Ribadeus. These two figures following belong one to the other at the AA together.



Thus sheweth Ribadeus, when you are thwart of it about a halfe league from the shore.



Thus sheweth the land to the westwards of Ribadeus, when the hill by S, is south from you, and followeth to the former figure. These three figures following belong one to the other, the AA and BB one to the other, and shew the rising of the land about Ribadeus, and to the westward of it.



Thus sheweth Ribadeus, when the hill to the westwards of it, marked here with P, is south and by east from you, 4 leagues.



This belongeth to the former, thee A A one to the other.



Thus followeth the two former figures to the westwards of Ribadeus, the B B one to the other

The third Demonstration,

Which Delinia teth the Sea-coastes of Galiffia and Portugale, betwene Ribadeus and the River of Port a Port.



Little league to the westwards of Ribadeus lyeth a tyde-haven, he that commeth from the west alongft by the shore thwart of it, shewld lightly thinke that to bee the haven of Ribadeus, but it is light to discern from it by these markes following. On both sides of this tyde-haven are the coasts all high land, but on both sides of the havens mouth of Ribadeus, it is low land. Also there lieth a high sharpe hill, and very good to be knowne, which ariseth out above all other hills thereabouts, which may be knowne at least 7 or 8 leagues off, upon it lye some hee apes of stones toe see to like little house, when that you have that hill S. S. W. from you, and saile in so right with it, then you shall with the land right before the havens mouth of Ribadeus.

Northwest from Ribadeus about 8 leagues, lieth the Cabo de Brilo, a little to the westwards of it lieth the little towne Viverus. Viverus. To the westwardes of the Bay of Cipriaen (where men may anchor in ten fathom) lye two great high rockes w. n. w. from these rockes about a halfe league lieth the land S. Ciprian, right before the haven of Viverus, whereby this haven is good to be know: you may saile about on both sides off this Iland into the haven of Viverus, in all alongft in the middle off the channell south and south and by west untill you come before the town, being within, you may anchor where you will either on the east or west side, it is there shewld water off 5 6, 7, and eight fathom, according as you run farre in. From the havens of Viverus or from the Iland S. Ciprian to C. de Ortegall, the course is w. n. w. nine leagues.

Betwixt both, a league to the westwards of Viverus, lyeth the litle towne of S. Marcus with a Bay, there men may anchor in 7 or 8 fathom, and ride for a S. S. W. and west wind.

Two great leagues to the westwardes of S. Marcus lieth the river of Caryns, there is also good anchoring, and from thence forth unto the Castle of Ortegall, all the coast alongft, it is there every where cleane. From Caryns to Ortegall, the course is northwest, five leagues. Ortegall is a great point lying out, to the eastwards of it, men may lye landlockt for a northwest, west southwest, and south winde, thwart of the castle is the best road, there men may anchor in 8 or 9 fathom. When men come

from the east. Ortegall is good to bee knowne, they shall see the castle stand against the high land.

About a league northnorthwest into sea from the C. de Or. c. Or. tegall, lieth a great rane of rockes: betwixt them and the fore- tegall. sayd Cape, men may saile through in ten fathom.

From the Cape Ortegall to the C. Prior, the course is south-west ten leagues: betwixt them both lieth a Towne called Sedeira, by the Dutch Schippers called Siverus, which hat a deepe haven lying in southeast. The north side of the haven is rocky and fowle, which you must avoyd, and run close in by the westland, which is a high land, alongft by it is twelve fathom deepe, within the havens mouth it is ten fathom deepe, you may saile in untill you come before the towne, and anchor there in 6 or 7 fathom.

Five leagues to the westwardes of Sedeira lieth the C. de c. Prior, which is a very ragged hill, to see to a far of, as if it were full of people.

Three leagues from the Cape de Prior, lieth the haven off Feroll: betwixt them both lye two little sand-bayes, the southmost (where in stand some little white houses) is the great. east, and lieth a little to the northwardes of the north point off Feroll; when you come neere the Baye, the haven beginneth to open it selfe, it lieth eastnortheast and east and by north in, amids the channell betwixt two high lands: when you come in, you must presently edge up to the northwardes by the north point and ancker there a little to the westwardes of the village Ferol, before the village it is flat and rocky ground.

When you come from the west, or from the Groyne, and will saile into the haven off Feroll, then goe away from the little Iland S. Blasius north and north and by west, and run a good wayes about, without the south point off Feroll (which is very fowle and rocky, untill that you see the haven ward. For to saile into Ferol from the southward.) open, goe then yet so farre to the northwards off the south-point, untill that the haven doe shut againe, and run then right in with the foresayd greatest sand-bay, wherein stand the two or three little white houses to the northwards off the haven, untill that you bee within the south point, and the fowle grounds which lye off from it, saile then right to the north point of the haven, and alongft by it towards the south-side, untill that haven doe open it selfe againe, and runne

runne then (as before) alongst in the midst of the channell. This haven is so narrow in the comming in, that you may cast a stone upon the land on both sides, and in that narrow it is 20 fathom deepe. When you are in the havens mouth, you may see through betwixt the Iland Sisarga, and the maine land to southwards of it.

For to saile into the Groyne. To saile from Feroll to the Groyne, the course is south, and south and by west 3 leagues, when you come neere the west-land, you must give it a birth, at least of foure or five Cables lengths, because it is not very cleane. When you come by the point where the Castle standeth upon you shall see then also a little Iland with a little house upon it, you may saile alongst by it within a halfe cables length, and runne about by it, up to the westwardes, untill you come before the Fisher village, and anckor there in fixe, seven, or eight fathom.

From Cape de Prior to the Groyne, the course is south, and south and by west five leagues.

Eastnortheast from the foresaid Iland where the Castle standeth upon, goeth in a Sound southeast, five or six leagues within the land, to Bitanze, where you may anckor on the west side under a row of rocks, in 10 or 12 fathom, also you may saile so deepe in, that you can see no sea.

Haven of Bitanze. To the northwards of that Sound, over against the point of the Groyne, lieth also another haven or Sound, called Ponte de Mas, on the north side lieth a row of rocks, where men run alongst to the southwardes of them: men may also saile there so deepe in, that they can see no sea. A good wayes within lieth a great bridge over the river.

Ponte de mas. He that commeth from the west off from the Yland Cisarga and is bound into the Groyne must give the north point or the west point of the Groyne (where the tower standeth) a birth of 4 or 5 Cables lengths, as before is said, which point is rocky and fowle farre from the shore, & run then east (southeast, and southeast about by the point, and afterwarde S. S. E. unto the little Iland with the Castle and about by it as is before said.

Iland Cisarga. The little Iland Cisarga, of the Dutchmen called Cesarie, is fowle round about, and lieth from the point of the Groyne, due east and west distant 7 or 8 leagues, from the haven of Feroll west and by south, from the C. Prior W. S. west and south-west and by west, and from the C. de Ortegall southwest, and southwest and by west 17 or 18 leagues.

Queres. From the Yland Cisarga south and by west, and S. S. west lieth Queres, a good haven also for great ships, the west shore is cleane, but the east shore is fowle, therefore men must saile in alongst by the west shore, when they are betwixt the two lands, then they must goe in amidst the channell, unto the point, and then run up the westwardes a great halfe league in, and anckor there in 7, 8, and nine fathom.

C. de Bylem. From the Yland Cisarga southwest and by west, and W. S. west 12, or 13 leagues lieth the east point off Monfie, called Cabo de Bylem, which is a high steepe point, with many ragged rocks lying of loofe from the land, whereof the greatest, being like a tower, doth shew it selfe black, and is called the Munck.

There lieth also a great rane of rockes right before the Haven or sound of Monfie, southwest and by south from the Munck, at least two or three cables lengths long but the innermost end of it lieth from the Monck south and by west. When men sail with the land of Monfie, it is all double land, about the Cape de Finisterre lieth a high white sand, lying in within the land a sand bay.

Also men may see comming about the C. de Finisterre, a ragged hill which runneth alongst so farre to the southwards that men may see it before the Moores.

Monfey. He that is bound in for Monfie, comming from Cisarga, must goe in close alongst by the C. de Bylem, or Bellem: this point is altogether a ragged high sharpe land of steep rocks, as before is said, and when you are by that point, then you must keep the Cape de Coriane a ships length without the Cape de Kote, so long untill that the Church of S. Maria come without the point of Monfie; run then in at the easter channell S. S. E. upon these markes, untill you be past the Church, then you shall see a row of rockes, run in behinde or within them, and anckor there before the village of Monfie in 5, 6, or 7 fathom. When you saile thus from the cape de Bylem to Monfie, then the rocks (which lye in the midst before the Haven) remaine about an English mile to seawards on the west side of you.

The wester channell of Monfey. For to saile in at the wester channell, you must go in E. S. E. in different neare alongst by the land, and when the foresaid Ladies Church commeth without the point, then you must saile towards the Rockes, which lye before Monfie, as is before said, and anckor within the rockes in 7 or 8 fathom, but run-

ne not to farre in, because there shooteth of a shold riffe alongst the haven, whereof you must take heed.

The easter channell is beter to come into, then the wester channell, saile not into Monfie before that you see the foresaid Church without the point, you may also anckor on the north side of the haven in five, six, or 7 fathom.

To the southwards of the village of Monfie is a Bay where the foresaid riffe or shold lieth before, lying E. N. E. at least cables lengths alongst the Haven.

Our Ladies Church and the Munck lye one from the other and by east and by S. and by w.

Southwest from the cape Bellem 3 leagues lieth the cape de C. de Coriane.

From cape de Coriane it is south and north three leagues to cape de Finisterre: Betwixt the two capes is a Sand-bay where men may anckor to the eastwards of a great rock in six or seven fathom. This is a great Bay which goeth in far into the land. At then side of this Bay lye rocks under water, whereoff men must take heed.

About a league to the eastwards of cape de Finisterre on the south side, lieth the Haven of Seche or Corcovia, and is called by the Dutch Schippe-masters, Corck Bayone. Betwixt this Haven and the cape lye two sandbays, the first, or that which is next unto the cape, is the greatest, and by the second goeth in this haven north, in eight and nine fathom. On the east side of the haven lieth a great Rocke, and about southsouthwest of from that Rock, almost in the midst of the haven, lieth a suncken rocke under water: But run in n. untill you espye the towne on the west side, and anckor there in 6 or 7 fathom. Within upon the River lieth also a Village, or little Towne, about northnortheast from you.

From Cape de Finisterre to the Haven off Moores, the course is southeast 5 great leagues, when you come about the cape de Finisterre, you shall see a high ragged hill which runneth so farre to the southwards, that you may see it also before Moores, that is good mark for to know the lead by thereabouts.

When the foresaid ragged hill is northeast from you, then are you thwart of cape de Finisterre, and then the hill Monte Lauro, which lieth upon the northeast point of Mooree, lieth eastnortheast from you, that is a high cloven hill which is also good to know.

Southeast three little leagues from the cape de Finisterre, lieth a rane of rockes under water, and eastsoutheast about two leagues from these rockes, lye also some rockes above water, a little to northwards of Monte Lauro, or the Sound of Moores, and lye from Monte Lauro west and by south. Also there lye a deale of rocks to the southwards of this Sound of Moores, and right in the midst of the Sound lieth also a suncken rock about southeast of from Monte Lauro.

He that will saile into Moores, he must bring Monte Lauro northeast and by north of him, and saile in so right with it, and then he shall not come to neere the fowle ground or dangers: when he cometh then by Monte Lauro, he shall see the foresaid rocks lying out to the northwardes of Monte Lauro, he must leave them as also the point of Monte Lauro two or three cables lengths on the larboard side off him, and sayle in so alongst by them, untill that the hee come past the second point, leaving the suncken rock (which lyeth in the midst of the Sound) on the starboard side off him: and when the fisher village which stands to the northwards of Monte Lauro, commeth to stand altogether bare, then he is within the suncken rock which lieth in the midst off the Sound south and by east easterley from the east end of the foresaid Fisher village.

When you come by the second point, you must runne in about it within a cables length, and edge up to the northwards, untill you come before the village, or up to the westwardes before the towne, where you please, and anckor there in 12 or 13 fathom.

If you will saile into Rio Roxo, then run about without the rockes, which lye to the southwards of the Moores, and goe in southeast and by south, untill that you come before the Haven of Rio Rosso, or Roxo, then you shall see a great many off rockes, lying off from the northland, almost unto a great rock, or Yland, called Salure: betwixt these rockes that lye out there, and the Yland Salure, you may well run through about to the Northwardes off the Yland but is very narrow, by reason of the aforesaid rockes, which lye off from the north land, therefore sayle about to the southwards off the same Yland, indifferent close alongst by it; leaving it on the larboard side, or to seawardes off you untill that you see the Sound open, and then runne in keeping the middle off the channell, unto that Yland Roxo, which you shall see lye in the midst off the Haven, when you come neere it, you may

The easter channell of Monfey.

Seche Corck Bayone.

Moores.

For to saile into Moores.

For to saile into Rio Roxo.

may anchor under the south-land, there are two Sand-bayes, where is good ancker ground.

About two leagues southwest from Rio Roxo lieth a suncken rock, Iohn Claez. Bors of Sardam, did sail upon it, and there lost his shippe the 20 of February 1613 in the night.

From Rio Roxo, or the Iland Salure, unto Ponte Vedra, or the Iland Blydones, the course is southsoutheast foure leagues, betwixt them both lieth and Yland called Monte Carbela; within it, it is three fathom deepe. Right before the haven of Ponte Vedra lieth the Iland Blydones which men may saile round about. On the north side it is not deeper then five or fixe fathom. There lye also within the Sound, on the north side two rockes called the Boos or Oxen. On the south side off Blydones is the right fareway for to saile into Ponte Vedra, this haven lieth in northeast untill within the Iland, somewhat furter in the midst off the haven lieth also another little Iland, which you must also goe the southwards off, therefore goe in eastnortheast alongst by the south-land, untill that you see the flat tower which standeth upon the south-land, and then you must run over a banck, right on with the point of Ponte Vedra, within it lieth the towne, thwart off the flat tower men may ancker in 8 or 9 fathom: This haven is at some places foure fathom deepe.

Five leagues to the southwards of the Ilands of Blydones lye the Ylands of Bayone, when men come in out of the sea, right with them, then these Ilands doe seeme to be all gray and black rockes, and lye to see to, as if they were three Ilands, although that the sea doe run through them, but at one place, betwixt each is a saddle or valley.

Within the land adongst over these Ilands, men shall see two high hills very good to be known, the eastermost hath three high hommocks, and the westermost two with valleys betwixt the hommocks; a little to the eastwards of the eastermost hill men shall see a white Abbey stand against the high land, whereby this land is very good to be knowne.

You may saile within these Ilands of Bayona either to the northwards or to the southwards; but at the northeast point of the Ilands lieth a rocke under water, about a cables length off from them, where of you must take heed, and ancker in 10, 11, or 12 fathom on the east side of the Ylands.

Hee that will saile in to the northwards, must run in betwixt the Ilands and the maine land, keeping neere about the middle of the channell, but neere to Ilands, untill that the Sound off Virgo, or Cannes bee open, and then saile in to the eastwards, there is a broad Sound, where men may ancker on both sides, to wit, on the southside before Vigo, and on the north side before Cannas in twelve or thirtheene fathome.

Also men may saile further in about the south poynt off Rondella, where men may save a shippe in the oaze, without ancker or cables.

At the point of Vigo lieth a little Iland, he that commeth in to the northwards of the Ilands, and is bound in for Bayone, may saile through betwixt that little Iland and the point Vigo, right in with Bayone, to wit, alongst a little to the westwards of the point, untill hee come before the towne, and ancker there in 4, 5, or 6, fathom.

Betwixt that foresaid little Iland, and the point of Vigo, it is at high water 4 fathom and a halfe, and at low water 3 fathom and a halfe deepe, men must (sayling through there) give the point of Vigo a birth, because of some suncken rocks that lye off from it. When that men lye in the roade before Bayone, in 5 or 6 fathom, they may see the Ylands of Blydones through betwixt the foresaid point of Vigo, and that little Iland.

From that same little Iland lieth to the westwards another little Iland or rock, betwixt them both it is fowle, so that men cannot saile through betwixt them, and from that westermost little Iland lieth a fowle riffe, or ledge of rockes, southwest off towards the point of the land of Bayone, where of men must take very good heed, wheter you come from the northwards and will saile through betwixt that riffe and the Ilands off Bayone, or els come in from the southwards, betwixt the Ilands and the maine, and will goe in for Bayone.

That riffe lyeth at low water at many places dry, the outermost rockes there of, and the point of Bayone, where the Castle standeth upon, lye southeast and southeast and by east, and northwest and northwest and by west and English mile afunder, therefore he that commeth from the northwards, and will goe into Bayone to the westwards off that riffe, that is betwixt the riffe and the Ilands let hem goe so long to the southwards, untill that the Castle of Bayone come to be E. S. E. and east and by south from him, and saile then towards it, and then he shall run farre enough alongst to the southwards of it.

At the south end of the Iland of Bayone, lieth a great rock,

with a deale of small rockes round about it, men may saile very close, alongst by them, but at high water the outermost rockes lye under water, where of men must be mindfull, close by the rocks it is 20, and 25, and 26, fathom deepe. From the point of the maine land over against the south end of the Ylands, runneth off a ledge of rocks, whereupon it breaketh very much, when the sea is grown where of also men must take heed.

When you come from the southwards, or out of the sea, and will saile in for Bayone, about the southwards of the Ylands with a southerly or southwest winde, then run right with the south point of the outermost land of Bayone, untill you come neere about a halfe league of the land, and then alongst by the shore, unto the outhter point on the south side of the comming into the bay, where that foresaid riffe runnet of, which lieth of low, give that riffe a birth, and runneth in betwixt it and the foresaid rockes at the south end of the Ylands, northeast, or eastnortheast in, according as you shall come in out of the sea, leaving the riffe on starboard, and the rockes with the Ilands on the larboard side untill that you come to the end, or to the northwards of the riffe, the north end, or the outermost point of that riffe at the south point, and the point Bayone where the Castle standeth upon, lye nearest east and by north, and west and by south a little league afunder. When as then you have the foresaid riffe (on the south side) upon your broad side, or els are to the northwardes of it, and that the Castle doe stand east, or thereabouts from you, goe then right in with the Castle, leaving that foresaid other riffe (which lieth off southwest from the little Ilands at the point of Vigo) on the larboard side of you. If you bring the point off the Castle, not to the southwardes of E. S. E. then you can not take any hurt of the northermost riffe.

The outer rockes of that northermost riffe, (which shooteth off from the two foresaid litle Ylands) and the riffe, which shooteth off from the south point of the land of Bayone, where men must saile through betwixt, lye on from the other southwest, and southwest and by south, and northeast and northeast and by north about an English mile afunder. When you come neere the Castle, then come no very neere the shore, which is not very cleane, and when, as then you come thwart of the innermost point of the Castle before that you begin to see the Towne off Bayone, from behind the point, you must looke well out before you: for from that same innermost point, and from the Castle, there lieth of a suncken rock about halfe a cables length from the foresaid point, whereupon remaineth at low water no more then nine or ten foot water, keepe therefore (thwart of it) somewhat of from the point. When as you begin to see the towne of Bayone, then luffe up suddenly south and saile before the Towne, and ancker there in five or fixe fathom, where you please, or els that the point of the Castle come against the westermost Iland of the two which lye off from the north point of the Bay, or point of Vigo, there it is good oasie ground that holdeth well, set your anckers when you morie, northwest and southeast, the best ancker to the southeast, from thence over the high land you shall have commonly the hardest windes.

If you must turn to and againe into the bay, then take very good heed, when you run off from the Castle, that you run not to far over southsoutheast; right before the Towne, southeast and by east, and east southeast from the roade about a musket-shot, lieth another suncken rock, which at low water is uncovered, it lieth a small cables length off from a little point in the south point of the bay, whereupon standeth a little house, to see to a farre of like a great green rock, you must be very careful of it; especially when you runne over towards the southsoutheast.

But hee that is bound into Vigo or Cannas to the southwardes of the Ilands, shall saile in betwixt that southermost Iland and the point of the land off Bayone, all alongst in the middle of the channel, northeast, or northeast, and by north in, at least two great leagues, keeping the norther haven two shippes length open, so long untill Cannas come to the northland without the point off Vigo: and then hee must leave the point of Vigo on the starboard side off him, and run in (keeping the middle of the channell) betwixt the northland and the Towne Vigo, and ancker there either before Cannas or Vigo, where hee pleaseth in ten or twelve fathom.

A little to the northwards off Camina, lyeth on the coast a high steep hill, above in the top with a clift or saddle, being called S. Rego, it is almost off fashion like Monte Sauro, but at least once so high againe, this hillie a very good mark for to know the places thereabouts. About halfe wayes betwixt this hill and Bayone, lyeth an Abbey upon the side of

For to saile into the southwards of the Ylands;

For to saile into Vigo or Cannas from the southwards.

S. Rego:

runne then (as before) alongst in the midst of the channell. This haven is so narrow in the comming in, that you may cast a stone upon the land on both sides, and in that narrow it is 20 fathom deepe. When you are in the havens mouth, you may see through betwixt the Iland Sisarga, and the maine land to southwards of it.

For to saile into the Groyne. To saile from Feroll to the Groyne, the course is south, and south and by west 3 leagues, when you come neere the west-land, you must give it a birth, at least of foure or five Cables lengths, because it is not very cleane. When you come by the point where the Castle standeth upon you shall see then also a little Iland with a little house upon it, you may saile alongst by it within a halfe cables length, and runne about by it, up to the westwardes, untill you come before the Fisher village, and anckor there in fixe, seven, or eight fathom.

From Cape de Prior to the Groyne, the course is south, and south and by west five leagues.

Haven of Bitanze. Eastnortheast from the foresaid Iland where the Castle standeth upon, goeth in a Sound southeast, five or fixe leagues within the land, to Bitanze, where you may anckor on the west side under a row of rocks, in 10 or 12 fathom, also you may saile so deepe in, that you can see no sea.

To the northwards of that Sound, over against the point of the Groyne, lieth also another haven or Sound, called Ponte de Mas, on the north side lieth a row of rockes, where men run alongst to the southwardes of them: men may also saile there so deepe in, that they can see no sea. A good wayes within lieth a great bridge over the river.

Ponte de mas. He that commeth from the west off from the Yland Cisarga and is bound into the Groyne must give the north point or the west point of the Groyne (where the tower standeth) a birth of 4 or 5 Cables lengths, as before is said, which point is rocky and fowle farre from the shore, & run then east/southeast, and southeast about by the point, and afterwarde S. S. E. unto the little Iland with the Castle and about by it as is before said.

Iland Cisarga. The little Iland Cisarga, of the Dutchmen called Cefarie, is fowle round about, and lieth from the point of the Groyne, due east and west distant 7 or 8 leagues, from the haven of Feroll west and by south, from the C. Prior W. S. west and south-west and by west, and from the C. de Ortegall southwest, and southwest and by west 17 or 18 leagues.

Queres. From the Yland Cisarga south and by west, and S. S. west lieth Queres, a good haven also for great ships, the west shore is cleane, but the east shore is fowle, therefore men must saile in alongst by the west shore, when they are betwixt the two lands, then they must goe in amidst the channell, unto the point, and then run up the westwardes a great halfe league in, and anckor there in 7, 8, and nine fathom.

C. de Bylem. From the Yland Cisarga southwest and by west, and W. S. west 12, or 13 leagues lieth the east point off Monfie, called Cabo de Bylem, which is a high steepe point, with many ragged rocks lying of loose from the land, whereof the greatest, being like a tower, doth shew it selfe black, and is called the Munck.

There lieth also a great rane of rockes right before the Haven or sound of Monfie, southwest and by south from the Munck, at least two or three cables lengths long but the innermost end of it lieth from the Monck south and by west. When men sail with the land of Monfie, it is all double land, about the Cape de Finisterre lieth a high white sand, lying in within the land a sand bay.

Also men may see comming about the C. de Finisterre, a ragged hill which runneth alongst so farre to the southwards that men may see it before the Moores.

Monfie. He that is bound in for Monfie, comming from Cisarga, must goe in close alongst by the C. de Bylem, or Bellem: this point is altogether a ragged high sharpe land of steep rocks, as before is said, and when you are by that point, then you must keep the Cape de Coriane a ships length without the Cape de Kote, so long untill that the Church of S. Maria come without the point of Monfie, run then in at the easter channell S. S. E. upon these markes, untill you be past the Church, then you shall see a row of rockes, run in behinde or within them, and anckor there before the village of Monfie in 5, 6, or 7 fathom. When you saile thus from the cape de Bylem to Monfie, then the rocks (which lye in the midst before the Haven) remaine about an English mile to seawards on the west side of you.

The wester channel of Monfie. For to saile in at the wester channell, you must go in E. S. E. in different neare alongst by the land, and when the foresayd Ladies Church commeth without the point, then you must saile towards the Rockes, which lye before Monfie, as is before said, and anckor within the rockes in 7 or 8 fathom, but run-

ne not to farre in, because there shooteth of a flowld riffe alongst the haven, whereof you must take heed.

The easter channell is beter to come into, then the wester channell, saile not into Monfie before that you see the foresaid Church without the point, you may also anckor on the north side of the haven in five, six, or 7 fathom.

To the southwards of the village of Monfie is a Bay where the foresaid riffe or showld lieth before, lying E. N. E. at least cables lengths alongst the Haven.

Our Ladies Church and the Munck lye one from the other and by east and by S. and by w.

Southwest from the cape Bellem 3 leagues lieth the cape de C. de Coriane.

From cape de Coriane it is south and north three leagues to cape de Finisterre: Betwixt the two capes is a Sand-bay where men may anckor to the eastwards of a great rock in six or seven fathom. This is a great Bay which goeth in far into the land. At then side of this Bay lye rocks under water, whereoff men must take heed.

About a league to the eastwards of cape de Finisterre on the south side, lieth the Haven of Seche or Corcovia, and is called by the Dutch Schippe-masters, Corck Bayone. Betwixt this Haven and the cape lye two sandbays, the first, or that which is next unto the cape, is the greatest, and by the second goeth in this haven north, in eight and nine fathom. On the east side of the haven lieth a great Rocke, and about southsouthwest of from that Rock, almost in the midst of the haven, lieth a suncken rocke under water: But run in n. untill you espye the towne on the west side, and anckor there in 6 or 7 fathom. Within upon the River lieth also a Village, or little Towne, about northnortheast from you.

From Cape de Finisterre to the Haven off Moores, the course is southeast 5 great leagues, when you come about the cape de Finisterre, you shall see a high ragged hill which runneth so farre to the southwards, that you may see it also before Moores, that is good mark for to know the lead by thereabouts.

When the foresayd ragged hill is northeast from you, then are you thwart of cape de Finisterre, and then the hill Monte Lauro, which lieth upon the northeast point of Mooree, lieth eastnortheast from you, that is a high cloven hill which is also good to know.

Southeast three little leagues from the cape de Finisterre, lieth a rane of rockes under water, and eastsoutheast about two leagues from these rockes, lye also some rockes above water, a little to northwards of Monte Lauro, or the Sound of Moores, and lye from Monte Lauro west and by south. Also there lye a deale of rockes to the southwards of this Sound of Moores, and right in the midst of the Sound lieth also a suncken rock about fourtheast off from Monte Lauro.

He that will saile into Moores, he must bring Monte Lauro northeast and by north of him, and saile in so right with it, and then he shall not come to neere the fowle ground or dangers: when he cometh then by Monte Lauro, he shall see the foresaid rocks lying out to the northwardes of Monte Lauro, he must leavethem as also the point of Monte Lauro two or three cables lengths on the larboard side off him, and sayle in so alongst by them, untill that the hee come past the second point, leaving the suncken rock (which lyeth in the midst of the Sound) on the starboard side off him: and when the fisher village which stands to the northwards of Monte Lauro, commeth to stand altogether bare, then he is within the suncken rock which lieth in the midst off the Sound south and by east easterley from the east end of the foresaid Fisher village.

When you come by the second point, you must runne in about it within a cables length, and edge up to the northwards, untill you come before the village, or up to the westwards before the towne, where you please, and anckor there in 12 or 13 fathom.

If you will saile into Rio Roxo, then run about without the rockes, which lye to the southwards of the Moores, and goe in southeast and by south, untill that you come before the Haven of Rio Rosso, or Roxo, then you shall see a great many off rockes, lying off from the northland, almost unto a great rock, or Yland, called Salure: betwixt these rockes that lye out there, and the Yland Salure, you may well run through about to the Northwards off the Yland but is very narrow, by reason of the aforesaid rockes, which lye off from the north land, therefore sayle about to the southwards off the same Yland, indifferent close alongst by it, leaving it on the larboard side, or to seawardes off you untill that you see the Sound open, and then runne in keeping the middle off the channell, unto that Yland Roxo, which you shall see lye in the midst off the Haven, when you come neere it, you may

may anchor under the south-land, there are two Sand-bayes, where is good anker ground.

About two leagues southwest from Rio Roxo lieth a suncken rock, Iohn Claesz. Bors of Sardam, did sail upon it, and there lost his shippe the 20 of February 1613 in the night.

Ponte Vedra. M. carbela Blydones. From Rio Roxo, or the Iland Salure, unto Ponte Vedra, or the Iland Blydones, the course is southsoutheast foure leagues, betwixt them both lieth and Yland called Monte Carbela; within it, it is three fathom deepe. Right before the haven of Ponte Vedra lieth the Iland Blydones which men may saile round about. On the north side it is not deeper then five or fixe fathom. There lye also within the Sound, on the north side two rockes called the Boos or Oxen. On the south side off Blydones is the right fareway for to saile into Ponte Vedra, this haven lieth in northeast untill within the Iland; somewhat furter in the midst off the haven lieth also another little Iland, which you must also goe the southwards off, therefore goe in eastnortheast alongst by the south-land, untill that you see the flat tower which standeth upon the south-land, and then you must run over a banck, right on with the point of Ponte Vedra, within it lieth the towne, thwart off the flat tower men may anchor in 8 or 9 fathom: This haven is at some places foure fathom deepe.

Iland of Bayone. Five leagues to the southwards of the Ilands of Blydones lye the Ylands of Bayone, when men come in out of the sea, right with them, then these Ilands doe seeme to be all gray and black rockes, and lye to see to, as if they were three Ilands, although that the sea doe run through them, but at one place, betwixt each is a saddle or valley.

Within the land alongst over these Ilands, men shall see two high hills very good to be known, the eastermost hath three high hommocks, and the westermost two with valleys betwixt the hommocks; a little to the eastwards of the eastermost hill men shall see a white Abbey stand against the high land, whereby this land is very good to be knowne.

For to saile into Bayone. From the northwards. You may saile within these Ilands of Bayona either to the northwards or to the southwards; but at the northeast point of the Ilands lieth a rocke under water, about a cables length off from them, where of you must take heed, and anchor in 10, 11, or 12 fathom on the east side of the Ylands.

Urge Cannas. Hee that will saile in to the northwards, must run in betwixt the Ilands and the maine land, keeping neere about the middle of the channell, but neere to Ilands, untill that the Sound off Virgo, or Cannas bee open, and then saile in to the eastwards, there is a broad Sound, where men may anchor on both sides, to wit, on the southside before Vigo, and on the north side before Cannas in twelve or thirtheene fathome.

Also men may saile further in about the south poynt off Rondella, where men may save a shippe in the oaze, without ankor or cables.

At the point of Vigo lieth a little Iland, he that commeth in to the northwards of the Ilands, and is bound in for Bayone, may saile through betwixt that little Iland and the point Vigo, right in with Bayone, to wit, alongst a little to the westwards of the point, untill hee come before the towne, and anchor there in 4, 5, or 6, fathom.

Betwixt that foresaid little Iland, and the point of Vigo, it is at high water 4 fathom and a halfe, and at low water 3 fathom and a halfe deepe, men must (sailing through there) give the point of Vigo a birth, because of some suncken rocks that lye off from it. When that men lye in the roade before Bayone, in 5 or 6 fathom, they may see the Ylands of Blydones through betwixt the foresaid point of Vigo, and that little Iland.

From that same little Iland lieth to the westwards another little Iland or rock, betwixt them both it is fowle, so that men cannot saile through betwixt them, and from that westermost little Iland lieth a fowle riffe or ledge of rockes, southwest off towards the point of the land of Bayone, where of men must take very good heed, wheter you come from the northwards and will saile through betwixt that riffe and the Ilands off Bayone, or els come in from the southwards, betwixt the Ilands and the maine, and will goe in for Bayone.

That riffe lyeth at low water at many places dry, the outermost rockes there of, and the point of Bayone, where the Castle standeth upon, lye southeast and southeast and by east, and northwest and northwest and by west and English mile asunder, therefore he that commeth from the northwards, and will goe into Bayone to the westwards off that riffe, that is betwixt the riffe and the Ilands let hem goe so long to the southwards, untill that the Castle of Bayone come to be E. S. E. and east and by south from him, and saile then towards it, and then he shall run farre enough alongst to the southwards of it.

At the south end of the Iland of Bayone, lieth a great rock,

with a deale of small rockes round about it, men may saile very close, alongst by them, but at high water the outermosts rockes lye under water, where of men must be mindfull, close by the rocks it is 20, and 25, and 26, fathom deepe. From the point of the maine land over against the south end of the Ylands, runneth off a ledge of rocks, whereupon it breaketh very much, when the sea is grown where of also men must take heed.

When you come from the southwards, or out of the sea, and will saile in for Bayone, about the southwards of the Ylands with a southerly or southwest winde, then run right with the south point of the outermost land of Bayone, untill you come neere about a halfe league of the land, and then alongst by the shore, unto the outh point on the south side of the comming into the bay, where that foresaid riffe runnet of, which lieth of low, give that riffe a birth, and runneth in betwixt it and the foresaid rockes at the south end of the Ylands, northeast, or eastnortheast in, according as you shall come in out of the sea, leaving the riffe on starboard, and the rockes with the Ilands on the larboard side untill that you come to the end, or to the northwards of the riffe, the north end, or the outermost point of that riffe at the south point, and the point Bayone where the Castle standeth upon, lye nearest east and by north, and west and by south a little league asunder. When as then you have the foresaid riffe (on the south side) upon your broad side, or els are to the northwards of it; and that the Castle doe stand east, or thereabouts from you, goe then right in with the Castle, leaving that foresaid other riffe (which lieth of southwest from the little Ilands at the point of Vigo) on the larboard side of you. If you bring the point off the Castle, not to the southwards of E. S. E. then you can not take any hurt of the northermost riffe.

The outer rockes of that northermost riffe, (which shooteth off from the two foresaid little Ylands) and the riffe, which shooteth off from the south point of the land of Bayone, where men must saile through betwixt, lye on from the other southwest, and southwest and by south, and northeast and northeast and by north about an English mile asunder. When you come neere the Castle, then come no very neere the shore, which is not very cleane, and when, as then you come thwart of the innermost point of the Castle before that you begin to see the Towne off Bayone, from behind the point, you must looke well out before you: for from that same innermost point, and from the Castle, there lieth of a suncken rock about halfe a cables length from the foresaid point, whereupon remaineth at low water no more then nine or ten foot water, keepe therefore (thwart of it) somewhat off from the point. When as you begin to see the towne of Bayone, then luffe up suddenly south and saile before the Towne, and anchor there in five or fixe fathom, where you please, or els that the point of the Castle come against the westermost Iland of the two which lye off from the north point of the Bay, or point of Vigo, there it is good oasie ground that holdeth well, set your ankers when you morie, northwest and southeast, the best anker to the southeast; from thence over the high land you shall have commonly the hardest windes.

If you must turn to and againe into the bay, then take very good heed, when you run off from the Castle, that you run not too far over southsoutheast; right before the Towne, southeast and by east, and east southeast from the roade about a musket-shot, lieth another suncken rock, which at low water is uncovered, it lieth a small cables length off from a little point in the south point of the bay, whereupon standeth a little house, to see to a farre of like a great green rock; you must be very carefull of it; especially when you runne over towards the southsoutheast.

But hee that is bound into Vigo or Cannas to the southwards of the Ilands, shall saile in betwixt that southermost Iland and the point of the land off Bayone, all alongst in the middle of the channel, northeast, or northeast, and by north in, at least two great leagues, keeping the norther haven two shippes length open, so long untill Cannas come to the northland without the point off Vigo: and then hee must leave the point of Vigo on the starboard side off him, and run in (keeping the middle of the channell) betwixt the northland and the Towne Vigo, and anchor there either before Cannas or Vigo, where hee pleaseth in ten or twelve fathom.

A little to the northwards off Camina, lyeth on the coast a high steep hill, above in the top with a clift or saddle, being called S. Rego, it is almost off fashion like Monte Sauro, but at least once so high againe, this hillie a very good mark for to know the places thereabouts. About halfe wayes betwixt this hill and Bayone, lyeth an Abbey upon the side of

For to saile into the southwards of the Ilands.

For to saile into Vigo or Cannas from the southwards.

S. Rego.

de of the land, that is also a good marke for to know Bayone, for him that commeth from the southwardes, but the chiefest markes are the two foresayd high Hilles within Bayone, the one with two, the other with three hommocks, when that with the three valleys or saddles is e. f. e. from you run in then right with it, you shall not faile to fall with the land, right with the Ilands.

Camina. Five leagues to the southwardes of the Ilands of Bayone, lyeth the haven of Camina, a broad haven, where you must go in (with great ships) at the heighest water. In the havens mouth, which lyeth in northeast and by east, lyeth a rock neereft the south side, close to the northwardes of this rock, is the deepest water, for to sayle in or out. Within in the haven, on the north side, lyeth a little Iland, and upon it standeth a little Tower, you must keep that over the Tower which standeth upon the north land, and so must run in right with them.

In this haven mouth is at halfe flood two fathom water.

At the north side of the haven it is altogether shold water, and very rocky ond fowle: there shooteth off a ledge of rocks, or riffe, whereof men must take good heed.

Viana. Seven leagues to the southwardes of Camina lyeth Viana upon a river. From the north poynt lyeth off a ledge off rockes thwart over before the mouth of the river, and upon the south shore, stand two Fiere-towers. If you will sayle in to the river off Viana, comming from the northwardes, or out of the sea, then run so long to the southwardes untill that the two foresayd Fire Towers upon the south side of the rivers mouth, come one to the other, and then run in right with them towards the strand untill that the little Tower upon the north-land come over the two houses, keep them one to the other, and runne then to the rock with the mast, and sayle alongft close to the eastward of it, and then you run in alongft over the Barre or the sholdest of the rivers mouth, there is at low water with an ordinary tyde two fathom depth. When you are past the foresayd rock with the mast then you shall see yet a head another rock with a mast or beacon, which lyeth on the north side of the river: run in likewise close alongft to the southwardes of it, and afterwards indifferent close alongft by the north-land, untill you come before the Town, there runneth of sometimes a little riffe which you must give a birth to, and anker before the town. When you lye before the towne, there lyeth a little Iland to the southwardes of you, where upon standeth a little Chappell: to the westwardes of that little Iland lyeth a great Banke, which at low water is uncovered, behind that banck it is five and sixe fathom, and before Viana seven, eight, and nine fathom deepe; when you come in, they may run in about to the southwardes of this foresayd Banck, and come out again before the town, by the little Iland, where the little house standeth upon.

When you come in about a bow shot within the second rock with the mast, there you may well let fall your anker and bring Cables on the south shore, and morre there by foute cables.

Men may anker without in the road in 12 fathom, there is the cleaneft ground for to take in a Pilot. It is narrow and dangerous barre for to come into.

Villa del Conde. From Viana to Port a Port, the course is south & by east 12 or 13 leagues, betwixt both lyeth Filla del Conde; seven leagues from Viana and from Metelyn. Villa del Conde is a broad haven, before the havens mouth lye many rockes, where men may sayle in about them on both sides, to the northwardes orto the southwardes of them it is five and sixe fathom deepe, further in lyeth a banck thwart over the haven of two fathom at high water: within in the haven it is 3 or 4 fathom deepe, on the north side it is all full off rocks, which lye most under water, but on the south side it is deepest and surest, and good lying in five and sixe fathom.

Rokes Lesons. Foure leagues to the southwardes of Villa del Conde lye out the great rocks, called Lesons, right before a little broad haven of two fathom depth, called Metelyn and southwest from the south poynt of the foresayd rockes Lesons; about a halfe league to seawards, lyeth a suncken rock under water: betwixt the land and the Lesons it is 6 and seven fathom deep.

port a port. A league to the southwardes of the rockes Lesons lyeth Port a Port. From the north poynt of the rivers mouth lye off many rockes, almost thwart over the channell. For to sayle in there, you must run in close alongft to the southwardes of the outermost rock, even so neere by it, that you may cast with a stone upon it. There standeth a little Chappell upon the north shore right against the rock with the crosse, and also a little white house upon the north shore somewhat further up upon the river, bring them one in the other, and run in so right with them untill you bee past the Castle. In seyling in so, you

shall not finde lesse upon the sholdest of the Barre, then 17 or 18 foot water at halfe flood, and shall not come to neere a suncken rock, which lyeth without in the rivers mouth, somewhat neerer the south shore then the north, whereupon there remaineth at low water no more then 11 or 12 foote water. Being within the Castle, goe then right towards the rock with the crosse & so close alongft to the southwardes of it, that you may reach it with a boat hook, or els you must run in three or 4 shippes lengths to the southwardes off it, or alongft by the south-land, untill you bee past the rock with the crosse, for to avoyd a suncken rock, which lyeth thwart of it a little to the southwardes of it, and at low water is no more then eight foot under water. Being a little past the rock with the crosse, go then up alongft in the middle of the channell, untill you come thwart of a great white Tower upon the north-land, there you may anker in 4 or 5 fathom, or sayle before the Towne, here it is 3 & 4 fathom deepe. A little past the rock with the crosse is a shold, whereupon remaineth at low water no more then 11 foot water, so that with shippes that draw 12 foote water, men must stay for high water, it floweth there six foot up and downe with an ordinary tyde.

On the south side of the river goeth in also a Land-deep to the southwardes of the foresayd suncken rock, wich lyeth in the rivers mouth, where the Pilots sometimes bring shippes in and out, that is a good channell, and oftentimes it is east to againe of the sea, so that there is no certainty to be Written of it that men shold trust upon.

Of the tydes and courses of the streames.

On these coastes, as on the former, as southwest and northeast moone maketh high water.

A southwest and northeast moone maketh full sea at the foresaid places, on the sea-coast, and within the havens a point later.

A northeast and southwest Moon maketh these coasts full sea, like as on all the coastes lying on the great sea, there goe also no streames alongft the land, because (through the swelling off the Ocean sea) the flood commeth right on against the coastes, and falleth right in and out at the Havens.

Courses and Distances.

From C. de Pinas to Avilles f. f. w.	3 leagues
From Luarca to Ribadeus w. f. w.	6 leagues
From Ribadeus to Cape de Brilo n.	8 leagues
From C. de Pinas to Ribadeus southwest and by west,	13 or 14 leagues
From Cape de Pinas to Ortegal west and by north westerly	29 leagues

How these landes doe lye one from the other, and from other lands.

From Cape Ortegal to Siverus southwest.	5 leagues
From Siverus to Cape de Prior f. w.	5 leagues
From Cape de Prior to Feroll south and by east	3 leagues
From Feroll to the Groyne south, and south and by west,	3 leagues
From the Groyne to Cifarga	8 leagues
From Cifarga to Queres, south and by west, and southsouthwest	1 leagues
From Cifarga to cape de Bylem, or the east poynt off Monfy, southwest and by west, and westsouthwest,	12 or 13 leagues
From Cape de Bylem to C. de Coriane, or Torrivian southwest,	3 leagues
From Cape de Coriane to Capo de Finisterre f.	3 leagues
From Cape de Ortegal to Cape de Prior southwest,	10 leagues
From Cape de Ortegal to Cifarga f. w. and f. w. and by west	19 leagues
From Cape de Prior to Cifarga southwest and by west,	nine leagues
From Feroll to Cifarga west and by south	8 leagues
From Cape de Ortegal to Cape de Corian southwest & by west	33 leagues
From cape de Ortegal to Waterford in Ireland north,	168 leagues
From Cifarga to cape Veio north	160 leagues
From Cifarga to Silly north and by east	137 leagues
From cape de Finisterre to Moores, or Monte Lauro southeast	5 leagues
From Rio Roxo to ponto Vedra f. f. w.	4 leagues
From Ponte Vedra, or Blydones, to the Ilands off Bayone f. f. e.	5 leagues
From Bayone to camina south and east	4 leagues
From cape de Finisterre to the Iland of Bayone, the course is f. e. and by south	18 leagues
From cape de Finisterre to port a port f. f. e.	44 leagues
From cape de Finisterre to Averro south and by east	53 leagues
From cape de Finisterre to the Burlings south	67 leagues
From cape de Finisterre to the great canaries f. f. w. southerly	307 leagues
From cape de Finisterre to the Salvages southsouthwest,	273 leagues
From cape de Finisterre to the Ile of Madera southwest and by west southerly	197 leagues
From cape de Finisterre to the Ile S. Michael westsouthwest	247 leagues
From Cape de Finisterre to the Ile Terceira west south west and by south.	278 leagues
From Cape de Finisterre to the south west point of Ireland n. and by west and north	173 leagues
From cape de Finisterre to cape de claro North.	173 leagues
From cape de Finisterre to Waterford, or the Southeast poynt of Ireland, north and by east	185 or 186 leagues
From cape de Finisterre to the Lizert northnortheast,	153 leagues
From cape de Finisterre to the Seames, north east and by north northerly	112 leagues.
From cape de Finisterre to Bell-Ile n. e.	122 leagues
From Averro to the Burlings f. w.	10 leagues
From Bayone to the Burlings f. and by w.	49 leagues

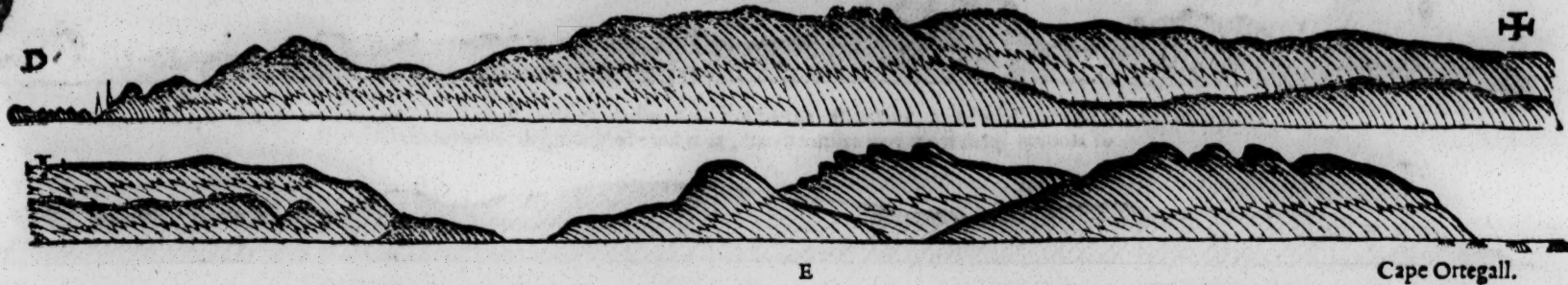
Heights.

cape de Ortegal lyeth in	44 degrees 5 minuten
cape de coriane in	43 degrees 8 minuten
The cape de Finisterre lyeth in	43 degrees
Bayone lyeth in	41 degrees 10 minut.

How

How these Lands doe shew them selves at Sea.

These two figures following belong at crosses one to the other, and shew the rising of the Land, a little to the eastwards off te Cape Ortegall, when the poynt marked with D, is five or six leagues, E, and by S. or E. S. E. from you, and the hill marked with E, is S. S. W. from you westerly.



Thus sheweth Ortegall, when it lyeth S. E. and by S. from you.

When Ortegall is Southeast from you, it sheweth it selfe thus.



Thus ariseth Ortegall, when the eastermost hill lyeth Southsoutheast from you, and that you may see the east end with cleare sight, being eight, nine, or ten leagues off at sea.

C. Ortegal.



These two figures belong at the double crosse, one to the other and shew the Cape Ortegall, with the land to the westwards of it, when the foreseyd Cape is east and by south five or six leagues from you.



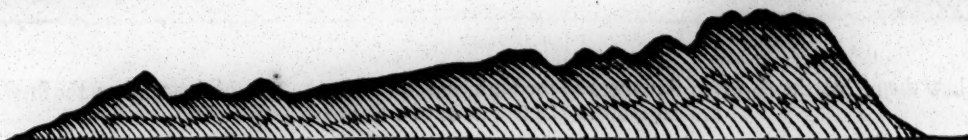
The land to the eastwards of the Groyne sheweth thus, when it is south and by east from you.



Cape Prior the east poynt of the Groyne ariseth in this forme.



Cape prior being southwest from you 6 or 7 leagues sheweth it selfe thus.



Cape Prior, being southwest and by south from you 4 or 5 leagues, sheweth it selfe thus.



C. Prior.

When the Cape Prior is east and by north, easterly 3 or 4 leagues from you, it ariseth in this forme.



Thus sheweth the Iland of Cifarga, when you are one league thwart from it.

Thus sheweth the land of Mon sie, betwixt Cifarga, and cape de Finisterre, when you come from the east, and seyle alongst by it.



When cape de Finisterre is southsoutheast from you, then it sheweth thus.



The cape de Finisterre, being Southeast southerly from you, sheweth it selfe thus.



Thus sheweth cape de Finisterre when it is Southeast easterly from you.



When cape de Finisterre is S. E. and by east from you 5 or 6 leagues then it sheweth it selfe thus.



Thus doth cape de Finisterre shew it selfe 5 or 6 leagues east and by south from you.

Monnick.



These three figures following belong one to the other, at the letter AA, and BB, and shew the rising of the capes de Coriane and Finisterre, as is shewed in the discription here under following.



The cape de Finisterre sheweth it selfe with the land o the southwards of it, as is portrayed in this and the figure following, when the ragged hill standeth east from you 3 or 4 leagues, and then shall see the land to the northward of it unto cape Coriane, northeast, unto past cape Coriane, in forme, as in the figure before this

H 3

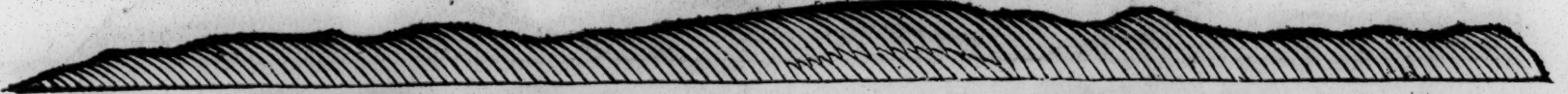
This

B

This followeth the former, and lyeth from the cape of southeast and by south.



Thus sheweth the cape de Finisterre, when the ragged hill lieth eastnortheast easterly from you, and then the land of Moores lyeth from you eastnortheast, as is here following demonstrated.



Thus sheweth the ragged hill of the cape de Finisterre, when it lieth east and by north from you.



When the cape de Finisterre lieth northeast from you, and the land of Moores eastnortheast fixe leagues from you, then lieth the cape in three parts, and the land of Moores thus.



When the ragged hill betwixt the cape de Finisterre and Moores lieth east and by north from you six leagues of, then it sheweth thus.



When the high land of Moores is northeast and by north from you about 6 leagues, then it riseth in this forme.

Monte Lauro, The high land of Moores.



When cahe de Finisterres is northeast or northnortheast, and Monte Lauro is eastnortheast five leagues from you the high land of moores sheweth it selfe thus.



Iland of Bayone.

Thus shew themselves the Ilands of Bayone, and the high land to the southwards of them, when the foresaid Ilands are eastfoutheast, a league or two from you.

Bayone.

Abbey.

S. Rego.



When the point of Bayone is eastnortheast, and the high land is east from you, then it riseth thus, to the southwards of it lieth the high Hill of S. Rego.



Bayone.

Abbey

S. Rego.

When the high Hill S. Rego is east from you, then the high land of Bayone sheweth it selfe thus. The Abbey standeth about halfe wayes betwixt S. Rego and Bayone.

S. Rego.



Thus sheweth the coast of Poltingall from Bayone to cape montego, when you saile alongt by it, about soure leagues of, the figure following belongeth hereto, at the crosses one to the other.

Cape de montego.



When that black Hommock where the hand standeth by, is eastfoutheast from you, then are you thwart of, or open before Averro.

The high land of Viana.

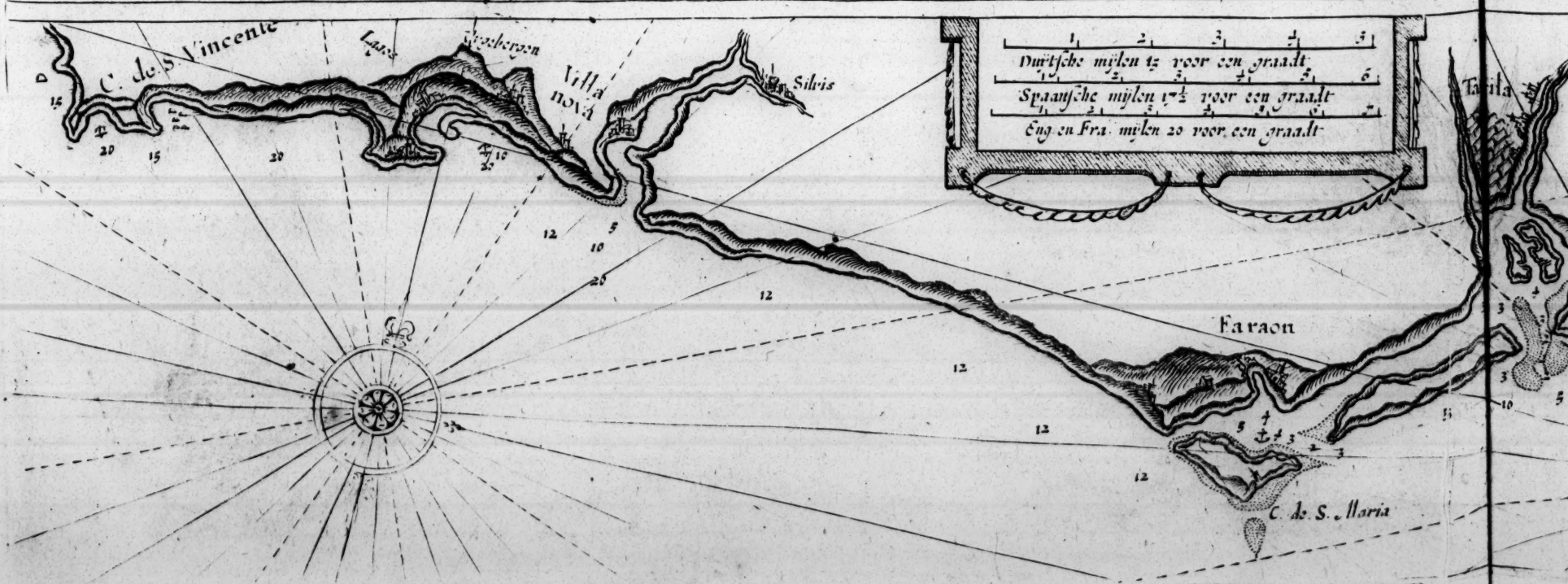
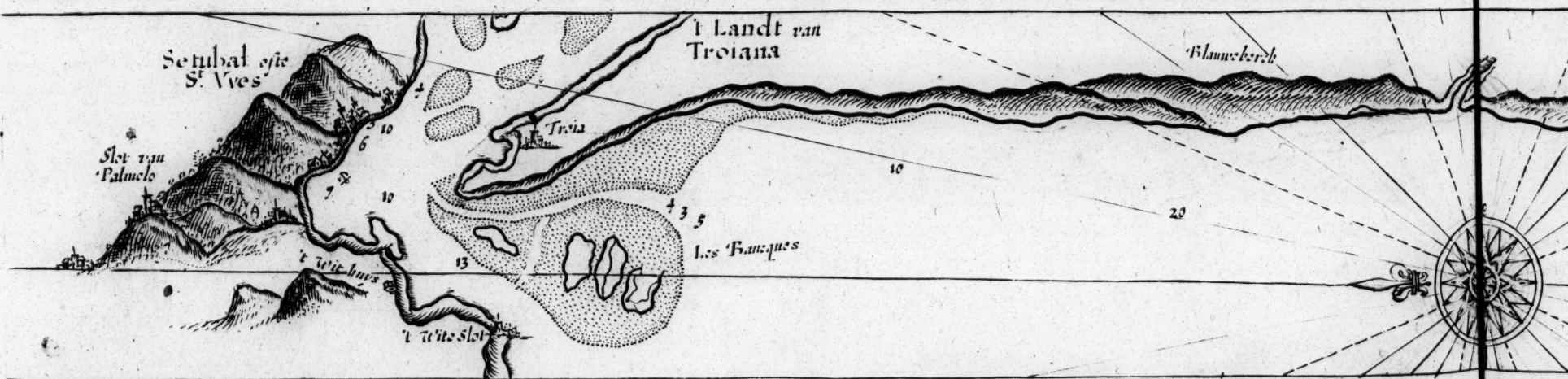
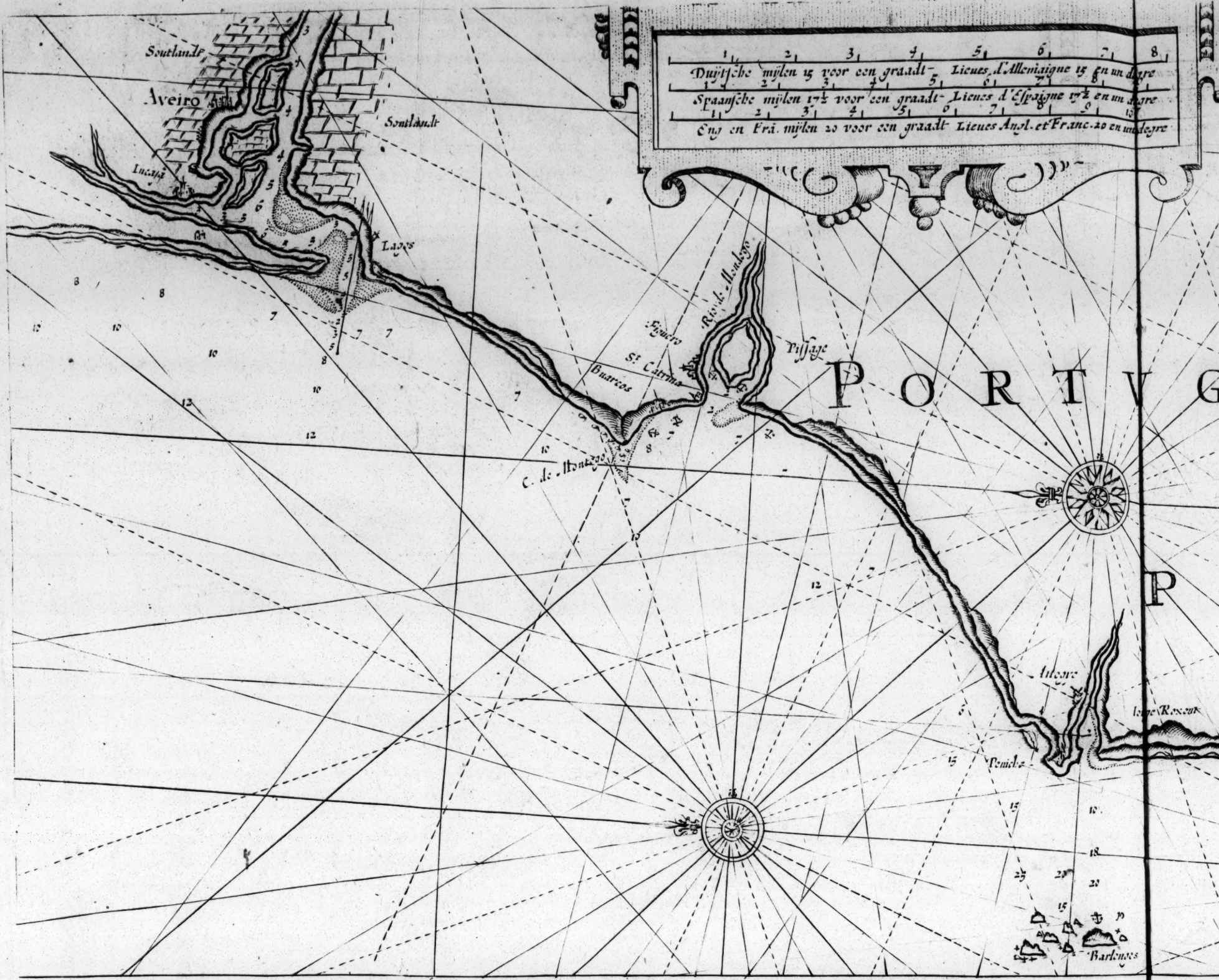


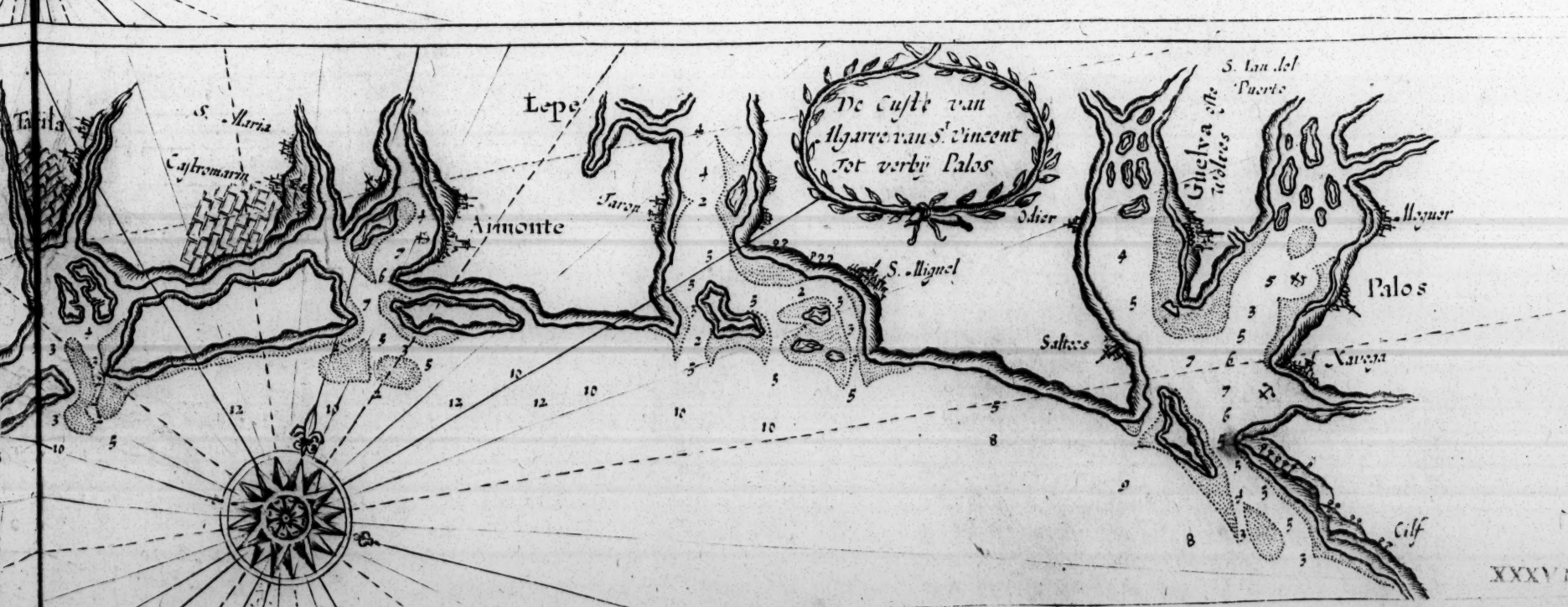
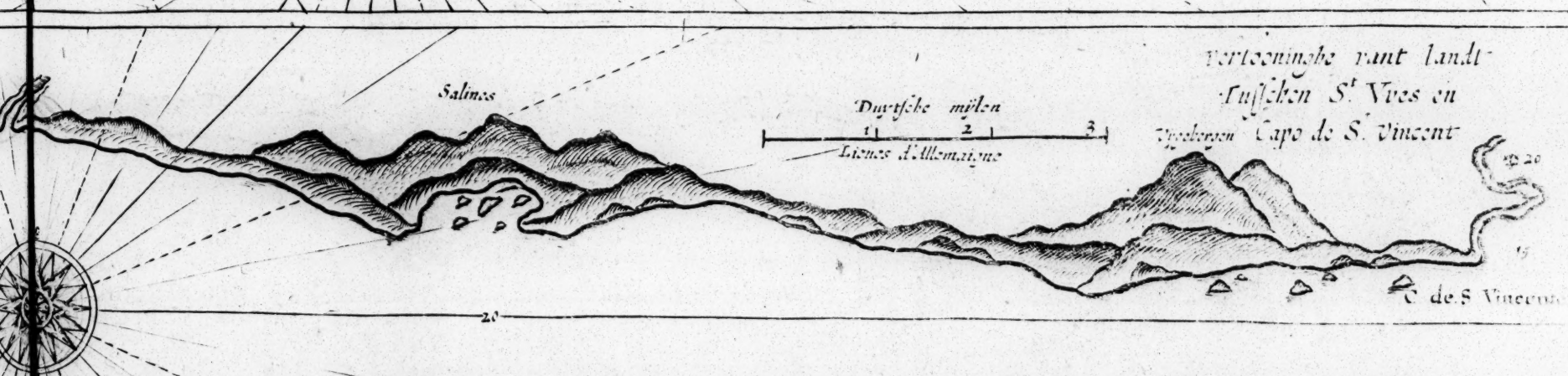
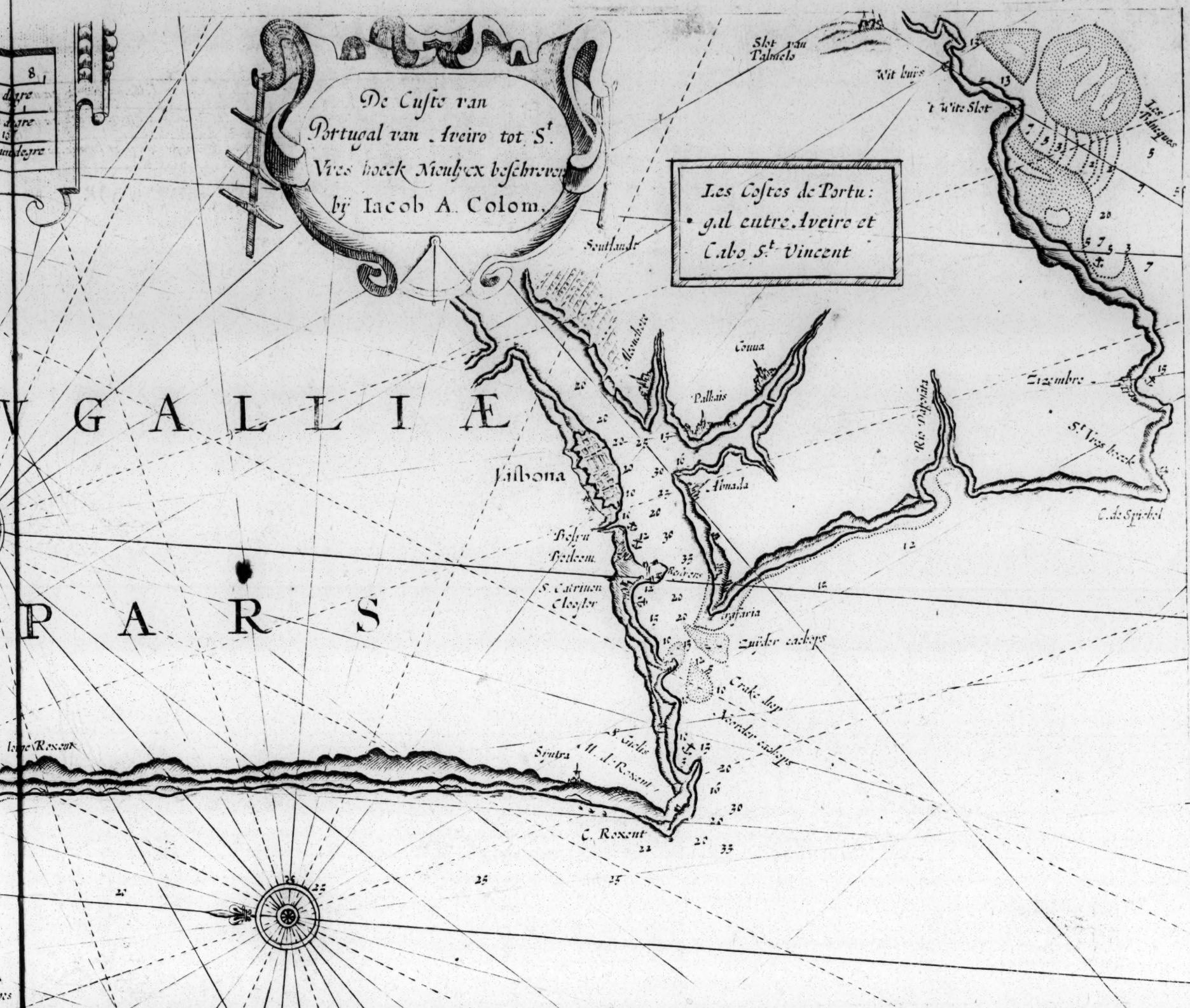
Thus sheweth the land of Viana, and to the southwards of it the Hommock by B is a leagues to the northwards of Villa de Conde.

The high land of Viana.



The land by Viana, and to the southwards of it towards Villa de conde, sheweth as is portrayed in this and the figure following, by V, is the rivers mouth of Viana.







This followeth the former figure, the Hommock at C, is two leagues to the northwards of Villa de Conde.

The high land of Viana.



Thus sheweth the foresaid land of Viana, and to the southwards of it, when Viana (being by A) is northeast from you 10 leagues Metelyne thwart from you.



Thus sheweth the land by Metelyne, when Metelyne is thwart from you and that you are close by the land.

Castle on the north side of Port a Port, when you come from the northward by the land.

The land to the northwards of Port a Port.



This figure belongeth to the former, and sheweth the forme of the land by port a port, and to the southwards of it, when you come from the southwards, you shall see a little village, with in the castle of port a port, called S. Iohn. A league to the northwards of it lyeth Metelyne.

The land to the southwards of port a port.

Avero



Thus sheweth the land betwixt port a port and Avero, when the high land to the southwards of Port is east and by south from you 4 leagues.

Abbey



Thus sheweth the land of Port, when you come from the southwards.



Thus sheweth the land of port a port, when it is eastsoutheast from you about foure leagues.

Viana

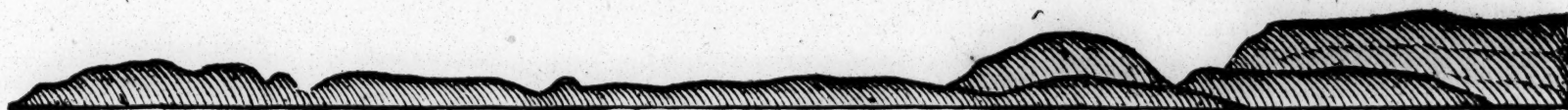
Villa de Conde.

Port a Port.



Thus sheweth the land from the northwards of Viana to Port a Port, when you saile alongst by it.

Port.



When port a port is southeast from you seven or eight leagues, then it sheweth with the land to the northwards of it in this forme.

The fourth demonstration,

In which the coastes from Port a Port to Palos are deciphered.

From Port a Port to Avero, the course is south, ten leagues: betwixt them both it is all alongst a cleane sand-strand, where men may behold to come neere the shore every where in ten or twelve fathom.

Within the land upon the high land lieth a black hommock in the land, when that lieth eastsoutheast from you, then you are open before Avero: when you cannot see the black hommock Cormole, then lieth there a rough sand-hill to the northwards of the Barre, when that is thwart of you, then are you a halfe league to the northwards of the Bar of Avero.

If you will saile in over the Barre of Avero, and that you come before it fixe or seven fathom, then take heed to three beacons made off mast which stand upon the south-land, bring them one in the other, and saile in so right with them east and by south, and E. S. E. in over the barre, there is in coming in, at halfe tyde, no more then two fathem water, untill that you come by the beacons, you shall so (being come within the points) saile alongst by a dry sand on the larboard side, edge then up northnortheast, and north west about by that foresaid dry sand, untill you come close to the norther-land, and run in by it, and then you shall leave all other showlds on the starboard side, untill that you see the river open, and then you shall see a little house upon the strand on the west side, goe them from thence op into the river, east and by south; and eastsoutheast, keeping the middle of the channell betwixt the two lands, untill you come before the Saltponds or Avero, where you may lade your ship with salt.

The Coast of Poltingall about Viana, is very good to bee knowne, by the foresaid hill of S. Rego, which is exceeding high, and lieth on the sea side: the high land of Viana, lieth two or three double within it.

Betwixt Viana, Villa de Conde, and Port a Port, men shall see alongst the coast many towers and littele houses, Villa dell Conde men shall see at sea like a great Towne.

The River of Port a Port men may know by the rocks Lessons, they are very high, and lye a little to the northwardes of the River.

The Cape de Montego is a high point, and within it in the land are high mountains. The Cape is somtimes taken to be the Rock, but it is easie to be discerned from it, because of the Burlings, which lye here to the southwards, and to the northwardes of the rock.

The Cape de Montego lieth from Avero S. S. W. distant 7 leagues: a league to the southwards of it lieth Pissage, or the River of Montego, a broad haven. From the Cape de Montego runneth of a rowle ledge of Rocks, a good wayes from the shore, which men must a voyd. Under the Cape men may ride for northerly winds in 7 or 8 fathom, a northnorthwest wind commeth right from the point, for southerly windes men may ankor to the southwards of the river of Montego.

From the south point of the river runneth of a sand-riffe, when you saile in there, and that you come in out of the sea, it sheweth as if you might saile into the southwards off that riffe, but it is not to be done: you must saile into the northwardes

wards off it. Upon the north point standeth a little village S. Catherina, and a litle to the northwards of it a Fisher village, called Buarcos. Upon the north side within the havensmouth standeth a lime kill, with a wood off Fig-trees, when you bring them one in the other, and then saile so right in with them, you runne in right in the channell, there is sometimes no more then twelve or thirteene foot water at a halfe flood: you may not certainly trust to the description of this haven; for in regard it is there sand-ground, it doth shift sometimes with the great Freshuts that come of the River, and also with stormes out of the sea. From Cape de Montego to Peniche, or Nova Lisboa, (at the Cabo del Fifiron, which is the point within the Burlings) the course is southwest and by south ten leagues, there lieth of a rock from the point, to the southwards of it is a great bay, where men may run in behind it with barks, and lye landlockt. In that bay lyeth a little town against the high land called Artogie, a little to the southwards of the Cape del Fifiron lieth a high round hommock, which the Dutchmen call yong Roxent.

From the cape Montego to the Burlings, the course is S. W. twelve or thirteene leagues. Behind the Burlings is a good roade and ancker ground, under the great land before the Ermitage, then you may ancker in ten fathom, you may come in there from the northwards or from the southwards, it is there broad and wyde, and every where cleane.

From the Burlings to the Rock, or Roxent, these course is south and by east, and southsoutheast sixteen leagues, but from the cape del Fifiron (behind the Burlings) to the Rock, the coast lyeth south and north fiftene or sixteene leagues. The Rock or Roxent is a point of land, very good to be knowne, although you be a great wayes of, yet you shall allwayes see the sharpe hommock of the Abbey of Syntra.

A great league to the eastwards of the point of Roxent, or the Rock, lieth the road of Cascalis, where men may lye landlockt for a northwest, north, and northeast winde, in 12 or 13 fathom, so deep, or shewld as they will. A great league to the eastward of Cascalis, lieth the point of S. Julian, or S. Gillians, whereupon standeth a strong castle, that is the north point of the River of Lisbon, the norther channell of the River goeth in within a bowles cast alongst by it.

For to saile into the norther channell, you must run in alongst within the length off a mast alongst by the foresayd poynt, but comming before the castle of S. Gillians, you must edge somewhat over towards the Carrick deepe, for to avoyd some fowle ground and rocks, which lye on the east side of the Castle. Being past that a little, you may luffe up againe towards the north shore, and saile alongst by it to Restiers, and so forth even to Lisbon, men doe commonly ancker before the Village of Boelyn in twelve or thirteen fathom. Men must take heed not to come into this channell with calme weather, and with an ebbe, which falleth very strong upon the norther Cachops: this channell of S. Gillians lieth in east and by south, being within, you must saile ut eastnortheast, and northeast and by east; and when you come against the Abbey at Restiers, then you must edge somewhat over towards the south-land, els you must keepe the north-land alongst.

For to saile into the Carrick deepe, you shall bring Cascalis, over the west point of Roxent, and keepe it so, untill that the litle Tower (which you shall see stand above the Abbey at Restiers) come over the white Abbey which standeth the farthest from Restiers, to wit, over S. Catherines Abbey or Cloyster, goe then northeast, and northeast and by north in, keeping these marks standing thus, untill that you come within the point off S. Gillies, and then goe in alongst by the north-land to Restiers within the Castle, and ancker there where you thinck it best. Upon these markes you may saile in and out at the Carrick deepe. If you come from the westwards, and will goe in to the Carrick deepe, then bring Cascalis over the west-end of Roxent, and saile so about the norther Cachops, untill that the town of Lisbon come within two ships lengths neere to the south-side of the River, and then further in northeast and by north, when as then you shall see the sand-bay within the point of S. Gillians, then are you in the right fareway.

But if it should happen, that you could not see the towne, or the litle Tower, then keepe the sand-bay (which lieth within S. Gillians point) northeast and by north from you and saile so northeast and northeast and by north in, and take the sounding of the norther Cachops in eight or nine fathom: when you begin to come against S. Gillians point, saile then indifferent close along by the northland, as is before said.

He that will turne out or in to the Carrick deepe, must bring the foresayd litle tower that standeth within the land, a ships length to the southwards, and a ships length to the north-

wards of the foresaid Abbey or Cloyster of S. Catherines, & then cast about every time, & so turne to and againe out and in.

Also come not with calmes in this channell, (neither bound inwards nor outwards) with an ebbe, for it falleth very strong over the east end of the Cachops.

If you will run out at the Carrick deepe, you must looke out for the foresaid litle Tower: when it commeth out from under that high land, bring it then a little to the westwardes of the second white Abbey or Cloyster, and goe away southwest and by south, and then the litle tower shall come to the Cloyster.

But if you must turne out to and again, then you must be very carefull of your tyde, for the streames fall very strong over the Cachops, so that it is very dangerous with calmes to come in or out at these channels, but especially in sailing out with an ebbe, for it falleth thwart over the Cachops.

From Roxent to S. Uves point, the course is southeast and by south 10 leagues, that is also a point good to be known, by a high round hill which lieth on it, also men shall see the top of the castle of Sisembre upon a flat hil like a great top or ridge of a country house.

S. Uves point is called cape de Pitcher, and by the Dutchmen Cape de Spichel, a little to the southwards about the point, is a rent or clift in the land, before it is good riding in 9 and 10 fathom. Before Sisembre men may also ancker in 15 or 16 fathom.

Five leagues to the eastwardes of cape Pitcher, or S. Uves point, lieth S. Uves, there lieth a great black before the Havens mouth. Beneath the high land upon the water side, standeth a white Castle, when that is northnortheast from you, then are you right before the havens mouth.

If you will saile over the bancks into S. Uves comming of from C. Pitcher, or S. Uves point, then keepe the west point of Sisembre a ships length without the east point, and goe then east, and east and by north on, untill that the castle of Palmelo which standeth above S. Uves, commeth in a valley over the foresaid white Castle upon the weather side. Saile then north-northeast right in with them, untill you come within the Castle thandeth upon the weather side, and then in along within a cables length by the north-land, northeast and by east, untill you come before the Towne of S. Uves, or Setuball. But when the Castle off Palmelo commeth under the land, that you can not see the same any more, there standeth also a white house on the north-side of the Castle that standeth on the water side, keepe that then so standing, and run in right with them, untill you come within the white Castle, and goe then in (as before is said) alongst by the north-land, untill you come before the Towne of Saint Uves, and ancker by the same Towne, before the Fisher village, in fixe or seven fathom. Upon the Bancke is at halfe flood three fathom and a halfe water, when you saile in over it, you shall finde at least seven divers showlds. There goeth in also a channell alongst by the south-land, but that is onely for barks: betwixt the souther channell and the right deep lye the banckes at some places so showld, that they lie almost above water.

For to finde the deepest water in sailing out over the banck of S. Uves, with shippes that draw much water, doe thus: when you saile out from the white Castle, then bring the foresaid white house over the north side of the Castle, that standeth on the water-side, so that you may see directly through betwixt them, and keepe them so standing, untill S. Uves point begin to come without the east point of Sisembre, then bring the white house to the south-side of the Castle, an run so out, you shall have there the deepest water. But when you can see that Castle of Palmelo, that is a direct alongst marck for to run over the bancke: And then that white Castle must be from you N. N. E. northerly.

It is from S. Uves point to C. de S. Vincent south and south salines, and by east 29 leagues betwixt both are no knowne havens, Salines a little river lying halfe wayes, is also unknown.

From S. Uves to Cape S. Vincent, the coast lieth most south and by west about 32 leagues, betwixt both lie some high steep hills, which men doe call the Salines, which are very good marks for to know this coast by, but above al serve for to knowledge of this coast of Algarve, or of the cape de S. Vincent, the Vigebergen, or Mount Chigo, which lye within Lagos and may be seen farre of a sea. A halfe league to the northwards of cape S. Vincent lieth a high cliffe in the land, that is somewhat whitish, and higer then the other land, when you see that, then you are by the cape de S. Vincent. Upon the point of the cape standeth a broken Abbey or Cloyster, and close by the point lieth a high rock, being called by the Dutch sailers Monnickstrand.

A little about the point of the Cape S. Vincent men may ancker

Cascalis.

S. Gillias.
or S. Gillians.For to saile
in at the
norther
channell.For to saile
in at the
Carrick-
deepe.S. Uves
point.Road un-
der S. Uves
point.For to saile
in over
the bancke
before S.
Uves.

Lee

S. Mich

Yaro

Palos
Saltees.

Wolves.

anckor in a sand-bay, for a north and northwest wind in twenty fathom.

Road under cape S. Vincent.

About the second point, to the eastwardes off the cape, is another sand-bay, there is a good road for a northwest and N. winde in 14 or 15 fathom. From the Cape de S. Vincent to Cape S. Maries, or Faro, it is east or a little more southerly nineteene or twentie leagues: betwixt them both lye Lagos, or Laves, and Villa Nova. From Cape S. Vincent to Lagos, it is east and by north 7 leagues, there is a tyde-haven through betwixt the rockes, behind a strand of chindle, which falleth dry at low water, men may also ride there for a northwest, westnorthwest, and north wind, in 10 or 12 fathom.

Villa Nova.

Villa Nova lieth about foure leagues to the eastwardes off Lagos, betwixt both, three leagues from Lagos, and one from Villa Nova, lyeth a suncken rock, where off men must take heed. Villa Nova is a good haven, it lyeth in north, and north and by west: at halfe flood you shall have there two fathom water; within in the haven on the east side lyeth a little island or rock, and upon it standeth a Tower or little house, also there stands upon the land a great mast with a barrell upon the top of it: when the little Tower, or little house, and the mast come one in the other, then you must sayle right in with them into the haven, alongst by the east land untill you be past the little Tower, the west side is flat and shold, when that you come by the mast, then you must goe up to the westwardes before the towne of Villa Nova, there you may anckor in foure or five fathom.

Faro.

From Villa Nova to Faro, or Capede S. Maria, it is about 9 leagues. Upon the strand standeth a fire-tower, and from the point shooteth of a riffe which men must avoyd; into the haven of Faro men must goe in from the eastwardes, it lyeth west, and w. n. w. in, and they must leave the tower on the larboard side, and run in two or three fathom; being within, they may anckor over against the Towne of Faro under the island in three fathom, it is upon the barre at halfe fload two fathom deepe.

The Cape S. Maries sheweth it selfe at sea (when you first see it) in one round hommock, which is a good mark for to know the whole coast of the Candado by.

Five leagues northeast and by east from Cape S. Marria or Faro lyeth Tavila, that is a crooked shold Barre, which almost every yeare doth shift, and is not to trust to for to sayle into it, unlesse it where first beakond, or set with buyes, it is a halfe flood scarce two fathom deepe, men lye there a little within the sand-hills in foure fathom.

From Tavilla to Ayemont, the course is E.N.E. 5 leagues.

Ayemont is a deepe Barre, and one of the best havens in the whole Condaet, it lyeth in northwest by the eastland, at halfe flood it is three fathom deepe; there lyeth some shold before the havens, the marckes there off are these. There standeth a tree upon the east side of the haven or rivers mouth, when Ayemonte commeth right against over the tree, then are you to the eastwardes of the shold or sands, which lye before the haven, then you must goe towards the foot strand, and leade it in alongst by it northwest, and northwest and by west; when you are within, you must goe up to the northwards before the Town, or if you wil goe before Porte Maria, the northwest course will bring you there; within it is wide and broad, and fixe or seven fathom deepe.

There goeth in also a haven by the westland, where men com in, right out of the sea, but that by the eastland is the best.

Leepe.

From Ayemont to Leepe, or S. Michiels the course is east and by north seven leagues. Leepe hat uncertain bars, which oftentimes shift, where men may not trust themselves to sayle into without a Pilot, the Barre that goeth into the eastwardes of the great island, is held to be the best, from thence they must goe up to the westwardes towards Taron, and the River, and so come to Leepe, and there they take their lading in before the deepe.

S. Michiels

The Barre of S. Michiels was wont to run thwart over into sea, and to be at halfe fload three fathom deepe, and before S. Michiels five fathom: from thence men may come through within over the shold at high water into the River at Leepe. Also men were wont to come in by Taron, but for certainty it is needfull to take in a Pilot for these Barres.

Taron.

Palos, Saltees.

From S. Michiels to Palos, or Saltees, the course is east and east and by south 7 leagues, here men sayle into the great Condaet, this haven goeth in at the west end of the Rooduyn, there standeth a graet broad tree to the westwardes off that white cliffe, that you must keepe over a red sand-hill, like as if it where red reath: this sandhill goeth sloping downe: runne in upon these markes unto the strand, about north and north and by west, then shall the tower Odier which stands above Wolves, come over the east side of the havens mouth, keepe them

so standing, and sayle alongst by the strand, within two cables lengths untill you come about the poynt, and then you run up north to Palos or northwest to Wolves, and anckor there in six or seven fathom.

It is deepe there within, fixe, seven, and also three and foure fathom in sayling up, according as men doe sayle farre up, or els not, this Barre is upon the shold at halfe flood three fathom and a halfe, but within it is five fathom deep.

There commeth also a channell running out of the sea betwixt the sands, then Wolves commeth to the east-side of the havens mouth, and men sayle n. n. w. in, when they are within the havens mouth, then they must doe as before is sayd. This channell is three fathom.

For knowledge of the land hereabouts you: shall understand that at the west end of the Rooduyn, lyeth a white steepe land, clyffy; being reddish earth or chalke: he that falleth there with, may thinck that he is by the havens mouth of Saltees, upon it stand some little wood of trees, els the land is all without trees, reddish sand, therefore called Roduyn, or Red sand-hill.

Of the tydes and courses of the streames.

A southwest and northeast moone maketh at all these places (on the sea side) high water, and within in the havens a point or two later, according as they lye farre within the land.

As on all the coastes of Portingall, even so here also on these coast a S. W. and northeast moone maketh the highest water.

A southwest and northeast moon maketh on these coasts full sea, within the havens a point or two later, according as they lye far within the land.

A northeast and southwest moone maketh high water at the C. S. Vincent, and at the C. S. Maria, also on the coasts lying betwixt them both.

But to the eastwardes on the Condaet maketh full sea a southwest and by south and southsouthwest moone.

Courses and Distances.

From Camina to Viana southsoutheast	7 leagues
From Viana to Villa del Conde south and by east	7 leagues
From Villa del Conde to Port a Port south and by east	5 leagues
From port a port to Averro south	10 leagues
From Averro to cape de Montego southsouthwest	7 leagues
From port a port to the Burlings southsouthwest and southwest and by south	19 leagues.
From Averro to the Burlings southwest	10 leagues
From cape de Montego to Peniche, or cape del Fifiiron southwest and by south	10 leagues
From cape de Montego to the Burlings southwest	13 leagues
From cape del Fifiiron, or nova Lisboa, to the Rock, or Roxent south	15 or 16 leagues
From the Burlings to the Rock, or Roxent, south and by east, and south-southeast	16 leagues
From the Burlings, to the cape S. Vincent south and by east	53 leagues
From the Burlings to the great Canaries, southsouthwest	148 leagues
From the Burlings, to the land palma southsouthwest and by south	256 leagues
From Roxent to the C. Pitcher, or S. Uves point southeast and by south	10 leagues
From cape Pitcher, the cape S. Vincent south and south and by east	29 leagues
From Roxent to cape S. Vincent south and south and by east	37 leagues
From Roxent, or the river of Lisbon, to the great Canaries southsouth w. westerly	140 leagues
From the river of Lisbon to the Ile de Salvages southwest and by south	201 leagues
From the river of Lisbon to Porto Santo south west	160 leagues
From the river of Lisbon to the Ile Madera southwest	173 leagues
From the river of Lisbon to the land Tercera west	373 leagues
From the cape S. Vincent to Lagos, or laves east and by north	7 leagues
From Lagos to Villa Nova east	4 leagues
From Villa Nova to cape Maria, or Faro east and by south	9 leagues
From cape S. Maries, or Faro, to Tavilo, northeast and by east	5 leagues
From Tavila to Ayemonte eastnortheast	5 leagues
From cape S. Vincent to cape S. maria east	19 leagues
From cape S. Maries to Leepe, or S. Michiels eastnortheast	17 leagues
From cape S. maries to Saltees eastnortheast	24 leagues
From cape S. Vincent to cape Cantin south	87 leagues
From cape Vincent to cape de Geer south westerly at least	133 leagues
From cape S. Vincent to the land Lanzerotte southsouthwest	165 leagues
From cape S. Vincent to the great Canaries, southwest and by S.	210 leagues
From cape S. Vincent to the Ile de Palma southwest	124 leagues
From cape S. Vincent to porto Santo southwest and by west	139 leagues
And to Madera southwest and by west	157 leagues
From cape S. Vincent to the Ile de S. Maria west	245 leagues
From cape S. maria to Sibeio east	29 leagues
From cape S. maria to the strait e. f. e. and f. e. and by e.	45 leagues
From cape S. maria to cape Cantin south and by west	90 leagues
From cape S. maria to the great Canaries southwest and southwest and by south	220 leagues
From cape S. maria, or Faro, to the Ile de madera southwest and by west	93 leagues.

Heights.

Port a Port lyeth in	41 degrees
Averro in	40 degrees 26 minuten
Cape de montego lyeth in	40 degrees 8 minuten
The Burlings in	39 degrees 40 minuten
Roxent lyeth in	38 degr. 53 min. or as some hold in 39 degrees
Cape Pitcher, or S. Uves point lyeth in	23 degrees 25 minur.
The cape de S. Vincent and S. maria lye in	37 degrees

How these Lands doe shew themselves at sea.

C. Montego

The land to the southwards of Montego.



The cape de Montego being northeast from you foure or five leagues with the land to the southwards of it sheweth it selfe as is portrayed in this and the figure following at the letters A A they belong one to the other.



Thus belongeth to the former, and is the land to the southwards of Montego, untill thwart of the Burlings.

Thus then shew the Burlings when the northermost are east from you a league.

The land betwixt Peniche and Roxent, or the Rock, sheweth it selfe as is portrayed in these three figures following when the high land to the southwards of peniche, being called yong Roxent, is east from you, the like letters, as AA and BB belong one to the other.



This belongeth to the former figure, and is the land to the northwards of the Rock, or Roxent.



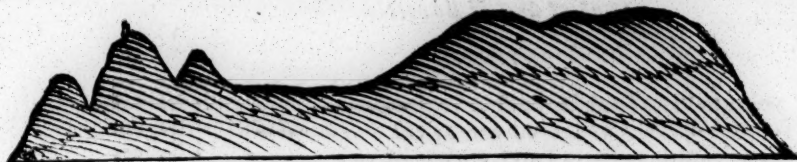
This followeth to the former figure, untill Roxent, or the rocke, at the BB one to the other.

Yong Roxent northeast and by east,

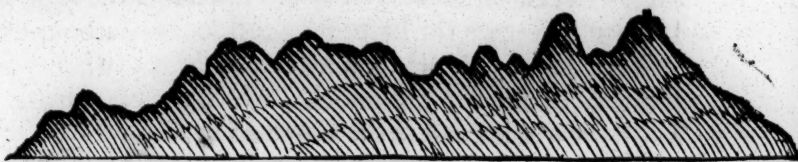
Roxent south and by east.



Thus sheweth the Rock, or Oxent, when it is south and by east, and yong Roxent is northeast and by east from you, and that you are close by the land.



When the Rock or Roxent is east and by south, and eastsoutheast from you seven leagues, it sheweth it selfe thus.



VVhen the Rock or Roxent is northeast from you seven leagues, it ariseth thus.



Roxent.

Casalis.

The land to the eastwards or to the southwards of Roxent towards Restiers, sheweth it selfe as standeth portrayed in this and the figure following.



S. Gillis:
This belongeth to the former.

C: Pitcher.

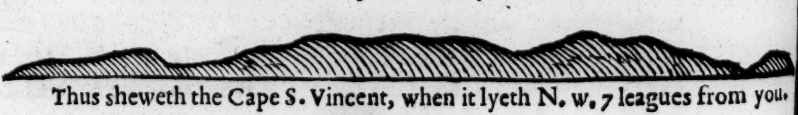


Thus sheweth the Coast betwixt the River of Lisbon, and S. Uves point, called C. Pitcher.

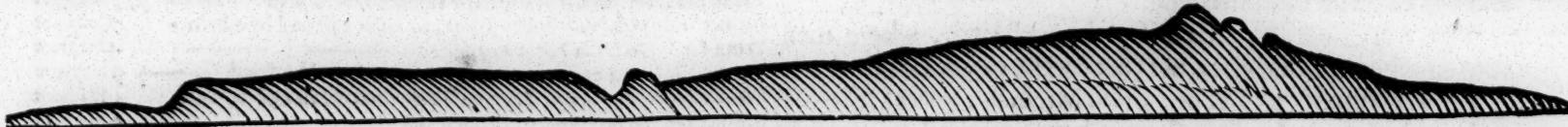
Thus sheweth S. Uves point when you come from the northwards.



Thus sheweth S. Uves point when it lyeth east and by north 6 leagues from you



Thus sheweth the Cape S. Vincent, when it lyeth N. w. 7 leagues from you.



Thus sheweth S. Uves point when it is northeast and by north foure or five leagues from you.



In this forme ariseth S. Uves point, when it is northnortheast 5 or 6 leagues from you.



Blew hil.

Salines.

Mount Chigo.

C.S. Vincent.

Thus sheweth the land about the C. de S. Vincent, when you come from the northwards, and sayle alongst by it.

Cape S. Vincent.

Mount Chigo.



The cape de S. Vincent sheweth thus, when it is north and by east, and northnortheast from you about 8 leagues. The Vighebergh or Mount Chigo lyeth then northeast and by north from you, in forme as is here portrayed.

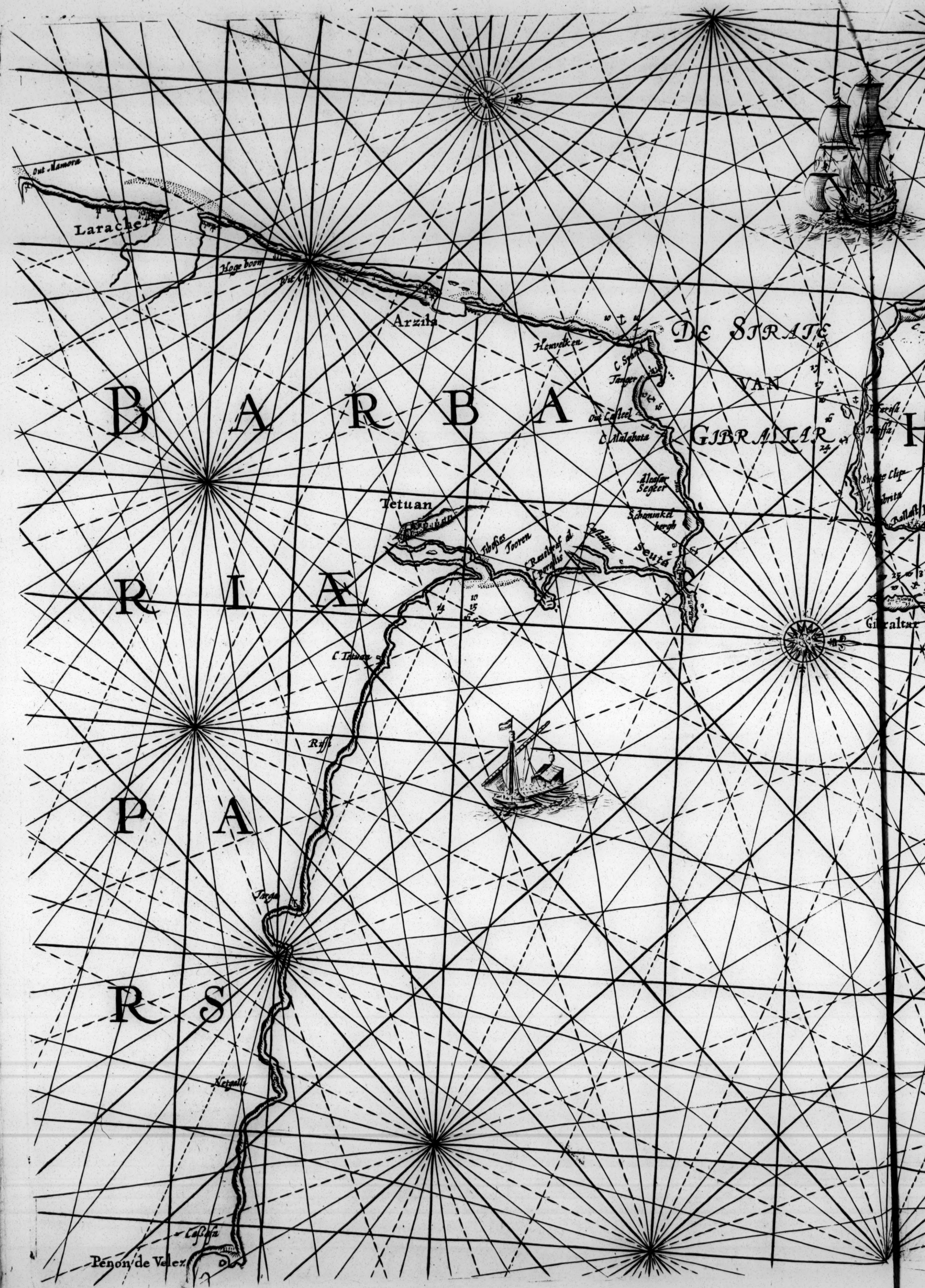


VVhen the Vighebergen; or Mount Chigo is northnortheast and northeast and by north from you 12 or 13 leagues, it sheweth thus, in one long hill, going downe flat at both ends, with another peece of land, much lower to the eastwards of it.

thus.

ards;

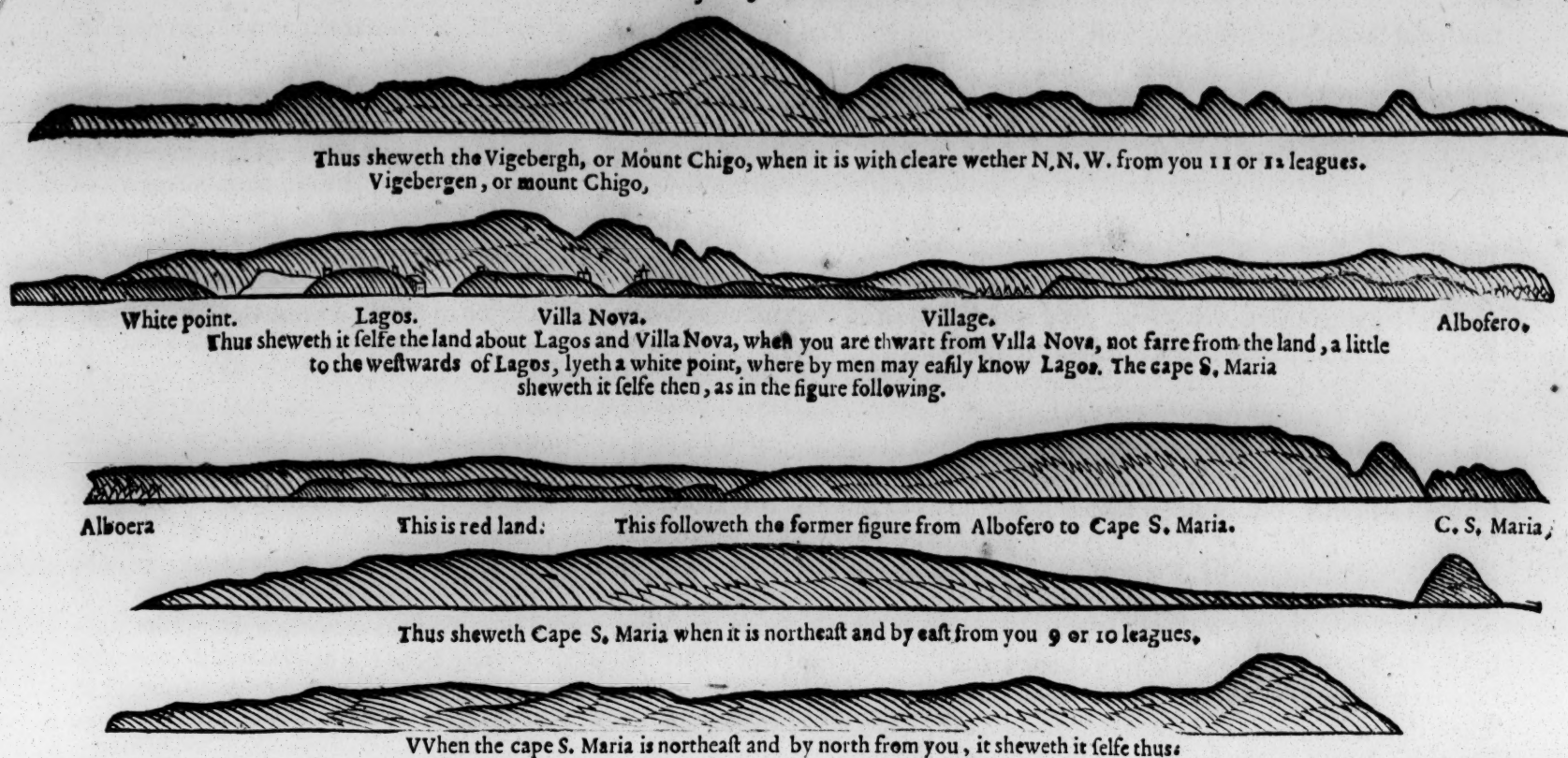
n you.





For
into
River
Luc

For
in
by



The fifth demonstration,

In which Are shewed the Seacoastes off Andalusia from Palos untill you are past the Straights by Madril, and the coast off Barbarie lying over against it, and also the cape Spartell on the coast of Barbarie to the ould Mamora.

For to faile
into the
River of S.
Lucas.

FROM Saltees to the river of S. Lucas, the course is southeast and southe, and by east betwixt 8 and 9 leag. If you will saile into the river of S. Lucas, then sayle alongst the red sand-hills, so long untill that you get the towne of S. Lucas in sight about eastsoutheast from you, there lieth a white cloyster to the eastwards of the town, against the high land, and there standeth a great tree upon the high land, bring the thre even to the northside or the cloister, so that you may almost see through betwixt then but not over the Cloyster, keepe then so standing, and sayle in right with them, and so you shall not come to neer the rocks to take hurt of them, and you shall have upon the shouldest at low water and neepe tydes, 3 fathom, and at high water 22 foot, or scarce 4 fathom. When the Castle of Chipiona and the Church beegine to come one in the other, then you come to the first rocks or should, when the Church and Castle are right one over the other, then they stand southsouthwest from you, then you are upon the shouldest of all, but when the Castle with the Church come againe one through the other, then you get againe deepe water, 3 fathom and a halfe, and 4 fathom at low water with a neepe tyde, sayle in alongst upon the foresaid markes of the cloyster and the tree, but take good heed that you bring not the tree over the Quire, at the south end of the cloyster, for you should then come very close to the rockes, rather bring the tree a little to the northwards of the cloyster, for you can not lightly take hurt of the red sand-hills, but you may borrow off them upon your lead in 3 and 4 fathom. There stande also a mill to the eastwards of the towne, take heed that you bring not that also over heround Cloyster that standeth a litle to the eastward beneath at the towne, but keep them a handspikes length asunder, and then you sayl in the best deep. But if the foresaid mill, and that round Cloyster come one in the other when you saile in, then you shall (without faile) come upon the rocks or shouldest. When you are within over the shouldest, sayl then towards the strand of S. Lucas, untill that you see altogether open into the river, for to avoyd the riffe that shooteth off from the N. W. point of the river, saile on alongst by the shore, and ankor before the little Church with the crosses (which stands below in the Sand-hills) in 5, 6, or 10, or 12 fathom, so neere as you please. Men may also turn out at this same channell with in different ships or barcks, but they must take good heed, it is not there very broad.

For to faile
in alongst
by Sipiona

There goeth in also a channell by the land of Sipionen or Chipiona, for to find it, you shall saile in within two Cables length neer by the foresaid land, untill that you be within the second shouldest, then you must edge somewhat off from the land, untill you come upon the foresaid markes of the Cloyster and the great tree, then you must run in alongst upon them, as is before taught. The river of S. Lucas is good for to know, by the Rooduyn, or red sand-hills which lieth to the westwards of it. From Sipionen to Cales Males, the course S. E. 9 leagues. Cales is knowne by the mountaine of Granade, when that is eastnortheast and east and by north from you, saile then right in with it, and you shall not faile to fall right before Cales. At

the point off Sipiano lye many rocks above water, and betwixt the point of Sipiona and Cales. Foure leagues from Sipiona lyeth Rotta, there shooteth of a great ledge of rocks from the point.

He that will goe into the bay of Cales, let him run in right with the rockes which lye on the west-side of the Bay, being called los Puercos, and within two cables lengths in alongst by them in 6 or 7 fathom, untill he come before the town of Cales, and ankor there so deep as he pleaseth, in 8, 10, 12, or 15 fathom, the fareway lieth most eastsoutheast and southeast and by east.

There lieth a rock under water, called the Diamant, about N. N. E. and N. E. and by N. from the Puerco, a graet halff league. When S. Catharins chappell upon the northland is E. N. E. from you, then are you thwart of that rocke, there is at halfe flood 3 fathom water upon it, the markes of this rock are these: When Mary Church cometh over the north end of Cales, (that is a Cloyster which standeth without Cales) there stands also a house upon the hill, where men goe alongst by, they goe to Sheres, when that house commeth over the chapel which standeth upon the water side, to the westwards off Marie port: when these markes come together one in the other then you shouldest faile upon the foresaid rock, there is upon the shouldest of it a high water, 13 fathom and a halfe water upon it. But set the two high hills which are to the southwards off the way of Sheres, that they bee a little asunder, and that they doe not come one in the other, then you cannot faile upon this rock. The Puercos rock lie from the north point off Cales about halfe a league. He that lies before Cales in the road, hath Puntall south from him, or there abouts, according as he lieth neer to Cales. But the southwards off Cales lieth a rock, come not neerer that then in seven fathom.

The Bay of Cales is wide and broad, men lye there in 5 and 6 fathom, the northwest wind commeth there open in. If any man therefore would goe further in behind Puntall, let him goe in S. E. betwixt the point of Port Real and Puntall, and run up about the point of Puntall, there men lye land-lock for all wiudes: there men may lay thier ships dry a ground for to make clean. He that will goe into the Creke, must take a Pilot, and run up into the water of Port real leaving the little lland on the larboard side, and then Herods Creeck shall open it selfe, and there hee must saile up, keeping the middle of the channell, till the come before the Saltheaps.

For to sail from Cales to the Strait, men must goe away S. and S. and by east to the Cape de Trafalgar, and then they shall run far enough without the banck or rocks which lye of south-east from Cales. From the point of S. Sebastian to C. de Trafalgar, which is the northpoint of de Strait on the west side it is S. S. east, 10 leagues. About two leagues to the northwards of the Cape, lieth Conil, there is a faire sand-bay, where men may ankor in 12, 13, and 14 fathom clean ground.

He that desireth to saile into the Straite of Gibraltar, comming from Cales, let him goe from the point of S. Sebastian, which is the westernmost point of the lland Cales,

Riffe off
Tarrife.

south and by east, and southsoutheast, towards the cape de Trafalgar, untill he be a good wayes without the land for to avoyd the Spanish coast which is fowle there lieth off west and by south from the iland Tarrife, a banck of stones 2 leagues, or two leagues and a halfe into sea, whereupon is eight, nine, or ten foote water, when it bloweth hard, men may see it break. The foresaid point of S. Sebastians, and the cape de Trafalgar lye ten leagues asunder.

Tanger.

When you are then somewhat without the Cape de Trafalgar, and set your course southsoutheast, and southeast and by south, then you shall fall with the land off the Barbary coast, within the Cape de Spartell, about thwart off Tanger, lying in a great bight and sand-bay. Upon the west point off this Bay of Tanger, standeth a castle somewhat high, and yet somewhat higher upon the high land, standeth a little watch-tower: but to the eastwards off Tanger standeth also and old ruinous watch-tower, whereby Tanger is very good to be knowne. From Tanger to Ape-hill, the coast lieth most eastnortheast, and e. & by north, that is the right course for to sayle through the Strait. If you will sail into the Strait by night, then keepe to the Barbary coast, which is very cleane, and there you can take no hurt: but the Spanish coast is fowle, as is before sayd. They that will saile alongst by the Spanish coast, they must goe close alongst by the shore, and runne through betwixt the iland Tarrife and the foresayd fowle grounds, close alongst by the iland, or els must keepe farre off from the iland, for to runne alongst without the howlds; but in the middest, neere a like unto both lands it is Best.

Cape de
Brita.

Three leagues to the eastwards of the iland Tarrife lieth the point of Cabrita, being the west point of the great Bay of Gibraltar over against the hill of Gibr: a little to the westwards of it, is a good road for a northeast wind, in 12, 10 and 8 fathom, not far from the shore, thwart of a great rock, which lieth close upon the water side, a little to the eastwards of the fire-tower: A little to the westwards of that firetower which standeth upon the foresaid point, is a fair sandstrand, betwixt the two towers there you shall lye smoot for the western grown sea.

At Gibraltar is a faire Bay, almost like a haven: if you will anchor in the Bay of Gibraltar, then saile so farre into it, untill that innermost point of the hill of Gibraltar, doe stand east from you, thereabouts it is deepe 5 or 6 fathom, and cleane ground: towards the mill it is sholder water of 3 fathom. Men lie there in the bay landlockt for a w. wind, a f. winde commeth from the poynt of Gibraltar hill, but a f. w. wind that bloweth there open in. From thence are brought good wines.

Bay of Gi-
braltar.

When you will set sayle from the road of Gibraltar with an easterly wind, it is good to beare up somewhat before the wind towards the west shore, and then forth out alongst by the lee shore, for the easterley winds do fall with such wirling and fore-flaughes, from over the high land of Gibraltar, that you shal be hardly able to get out off the Bay alongst by the high land. When you com from the eastwards, and will saile out through the Statiss, & that you are somewhat neere to the Spanish coast, then you must be very carefull, for that you bring the hill off Gibraltar, against the high land of Barbary, and in regard the land to the nordwards of Gibraltar hill is low, it seemeth (to look to) to be nothing els, then as if there were the opening off the Straites. It hath heretofore happened, that some which have so mistaken it, have sayled into the bay, thinking it to be the opening of the Strait, and so have lost their ships there. Therefore it is very need, that men take great care not to mi-

stake themselves off the hill of Gibraltar, and if men do take heed off it, it is good for to know.

Estepona lieth 5 leagues to the eastwards or to the northwards of Gibraltar, betwixt them both stand divers firetowers upon the coast, there is cleane ground for to anchor. If you will anchor to the eastwards of Gibraltar, by the next tower of Gibraltar, then bring Gibraltar s.f.w. from you, and anchor in 25 fathom, there is cleane ground, and black sand, but if you will anchor by the second firetower, there is a falley, and there you may fetch water, and anchor in 20 or 22 fathom, there is a valley & there is also cleane ground, and better lying for to set sail with easterly winds, for those that are bound out of the Strait before Estepona men may anchor in 14 fathom, that is a place for to lade fruite and wines; 5 or 6 leagues to the eastwards off it lieth Marveles, betwixt them both stand 5 watch towers upon that coast.

From Gibraltar to Marveles, the course is n. e. and by n. d. Marveles, stant 12 leagues, if you will anchor at Marveles, then you must look out for two Pack-houses with stand upon the strand and a great esquare watchtower close to the eastwardes of the foresaid Pack-houses: bring the gate of the towne so, that you may see through betwixt the Pack-houses and the watchtower, and anchor there in nine or ten fathom. Right before Marveles; the ground is not cleane. About a shot off a Cast peece to the westwards off the town, men may fetch fresh water.

From Marveles to Fangerola it is 5 leagues e. n. e. betwixt Fangerola them both stand also 5 watch-towers. Fangerola is a castle, and hath a faire sand-bay, there is good anchor ground in 7 or 8 fathom, a flat rising ground, men may lye there landlockt for a west southwest wind.

From Fangerola to C. de Mol, the west point of Mallaga, the course is forth n. e. two great leagues: but from the w. point of Mallaga to the town of Molling, the course is n. e. and n. e. and by e. 4 leag. it is the betwixt them both a faire strand where men may anchor all alongst in 10 or 12 fathom.

Mallaga is knowne by these markes. There standeth a Castle to the eastwards upon the high land, and there come 2 walles downewards towards the sea to another Castle which lyeth by the water side. Before that same Castle is now the road, that which was wont to be the right road, is now altogether spoyled by casting off Ballast.

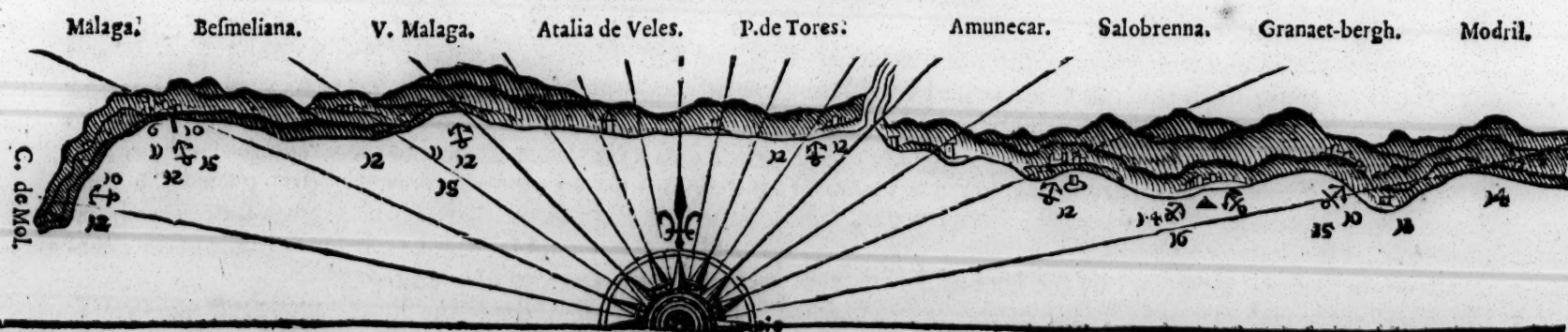
If you will anchor in the road before Mallaga, then anchor in 10, 11, 12, or 14, fathom, thwart of from the head, of: that the head com to lye from you north and by east, there is very good ground, the anchors hold there well, also men lye there out off danger for the Mores.

Velez Mallaga lieth from Mallaga east and by north distant 7 leagues, betwixt them both men may anchor all alongst by the shore. About a league to the westwards off Velez Malaga standeth a little Castle, before it is good Anchoring in 10 or 12 fathom. By the next Tower, to wit, the next to the little castle, there is fresh water to be gotten on the land.

The towne off Velez Malaga lyeth about a league within the Velez Malaga land; but upon the strand standeth a great Packhouse which to lye to, is like a castle.

If you will anchor at Velez Mallaga coming from the westwards, then you must give the west point a birth; there lyeth off a bancke a good wayes into sea by the watch-tower which standeth below, to the westwards off Velez Mallaga: but if you run alongst by the shore in 10, or 11 fathom, without comming neerer the shore, then you can not take any hurt in the fo-

The coast of Spain from Malaga to Modril.



C. de Sacrostyf.

resayd bancke or riffe. When as the towne of Velez Mallaga commeth a little to the eastwards of the foresayd Pack-houfe or tower which standeth upon the strand, then anchor in 12, 10, or 8 fathom, it is there all cleare and cleane ground.

From Velez Mallaga to Almunecar, the course is east, 15 or 16 leagues, betwixt them both it is all cleane Coast, men may anchor there under al the points which lye betwixt them both.

Two great leagues to the westwards of Almunecar lyet a

poynt, whereupon standeth a fire tower, under it is a good road for a west wind.

If you will anchor at Almunecar, then anchor to the westwards of the rock, where the little chappell standeth upon in 12 fathom, there is good ground, and shall lye there landlockt for an east and westnorthwest wind.

Salobrenna lieth from Almunecar 4 leagues to the eastwards, that is a little Towne with a little Castle, and lieth upon a hill a little

little about the east point of Almunecar, and right before Salobrena lyeth a little land, he that will anchor there must anchor to the westwards of it, there he shall lie lādlockt for a n.e. wind, & also for a w. wind, then the shall have succour of the e. point of Almunecar. Mē may also wel anchor to the eastwards of that little land, but to the westwards of it is the best road, there lie also all the ships, they may anchor there in 14 & 15 fathom, clean soft ground, in 16 fathom they shall lye somewhat to farre out. Men may (if need so require) run through betwixt the foresaid little land, and the maine land, betwixt them both there is about 16 or 17 foot water; & the little land is round about clean, so that men may run very close alongst by it without feare.

Two great leagues eastwards from Salobrena in the same bight, a half league from the sea side within the land lyeth Modrill, which hath 2 Churches and some trees, thereabouts upon the water side standeth a square tower.

If you will anchor at Modrill, then anchor before the foresayd square tower, which standeth upon the water side in 12 or 13 fathom, so that you may see the little tower upon the east point even without the other point, there is cleane ground, men lye there landlockt for an east wind, but a south east and a south wind make theree (like as at all places on these coasts) a lee shore. A little to the eastwards of Modrill lyeth the point, called Cape de Sacraftjff.

The Coastes of Barbarij.

For to saile out of the Bay of Gibraltar to Tetuan, then run over south and by east, about close by the pointe of Seuta, especially with a westerly winde, you shoulde otherwise be carried away so with the current, which then commonly runs to the e. wards, that you should fal to farre to the Leewards. Comming then about by the point of Seuta, you shall see out a head a black point, called cape Porques, lying south from the point of Seuta: When men lye in the Bay of Gibraltar, they may see the foresaid cape Porques alongst over Seuta: which is a point very good to be known, sayl towards that point, and with a west wind luffe up so neere as you can. When you come about that point, then you shall begin to se Tetuan, which lieth up against the high land, a great league within the land: run then so far to the southwards, untill that the east end of the towne come right over a little round hommock, which is upon the high land within. In the middest off the towne standeth a black tower, and in the innermost land off al within, lye 3 little hills, which doe (as it were) looke over the outermost inner land, bringh the 3 little hills over the foresayd black tower, & anchor then so farre from the shore, that the first little hill of the high land to the southwards of Seuta towards C. Porques, come a little without C. Porques, there it shall be 16 fathom deep, and good soft ground. If you anchor otherwise then upon these foresayd marks, you shall have bad, stony & sharpe ground. It hath happened that some ships have ankored there, buy their ankors fel so in to the rocks, that they could not weigh them again, but must hew of their cables, & leave their ankors behinde them. Therefore if you come of from the point of C. Porques, then be carefull that you bring the foresayd first little hommock (which lyeth a stearne off you in the bight off Seuta to the S. wards of Seuta) a little without the C. Porques, and so keep sailing to the southwards, & keep heaving of the lead continually without ceasing untill that you get the soft ground, so soone as you shall feele it, let then presently your anchor fal, for the place wher the soft ground is, is not 2 cables lengt in compasse great.

Tetuan lieth from Seuta a bout 6 leagues, and 3 or 4 leagues to the southwards of it lyeth a point, called cape Tetuan, whereupon standeth a tower. He that hath never been at Tetuan, might easily be mistaken by that point, taking it to be cape de Porques, the sooner because that som say that Tetuan lyeth at least 9 leagues to the southwards of Seuta. It hath happened that ships have sailed into this poynt, and have so runne past Tetuan, therefore it is best that men goe not to farre from the shore either by night or by day for to get the Cape Porques certainly in sight.

The Bay off Tetuan betwixt this cape Porques and C. Tetuan, is a sand-bay altogether of sand-strand with low hommocks here and there upon the sea-side, which a farre of seeme as if they where ships, but the ground thereabout is altogether foule, except such a place as before is say. Betwixt the Cape Porques and Seuta it is also a faire sandstrand, but thwart off it is all good ground.

The Coast of Barbarie in the Straite off Gibraltar, lyeth from Seuta to Cape de Spartell west and by south, and west-southwest eight or nine leagues. But the cape de Spartell, and Cape de Trafalgar on the Spanish side, ly north and by west, and south and by east eight leagues asunder.

From Cape de Spartel tot Arzila, the coast lyeth south and

by west seven leagues, betwixt them both alongst the sea side it is all lowe land, with some points and high within, with a white sand-hilly strand. A little to the southwards off the point of cape de Spartell, men may anchor for easterley windes in 12 or 13 fathom, cleane sand-ground, but so soone as the winde doth shift to the west they must bee ready to get under saile, lest they be inbayed upon a lee shore.

About a league to the southwards of the C. lyeth a little hommock upon the low land, by the water side, which sheweth (in sayling by) like a broken schonce or castle.

Arzila is a little walled town, lying upon the water side, and hath a little bard haven, which men doe sayle into at two places through a row of rockes, which lyeth before it, the northermost channell is the deepest, but both of them are not fit but for small shippes. Being come within the rocks men doe anchor betwixt the town and the rockes.

From Arzila to Alarache, the coast lyeth also s. and by west 8 leagues, it is altogether a cleane coast with some roks on the shore, the land betwixt them both is somewhat higher then betwixt Arzila & the C. with high land within. About an English mile to the southwards of Arzila standeth a tower, and somewhat further to the s. wards, upon the high land, stand some little houses, but men cannot wel see them, except they saile close alongst by the coast. Betwixt Arzila and Alarache, but somewhat neerer Alarache then Arzila, lieth on the sea side, a high white cliffe which is very good to be known, betwixt that cliffe & Alarache standeth upon the high land a very high tree, with some other trees by it, when men come from the n. wards alongst by the shore, that great tree semeth to be a tower, yet somewhat to the s. wards standeth an other great tree, but not so great as the other: when men begin to come neere to Alarache, or els by the southermost great tree, then the foresayd greatest tree doth hide it selfe behinde the land. These are all very good marks for to know this coast by, betwixt dese 2 places.

Alarache lieth with a great Castle upon the s. point of a river, which is very shold and crooked, the north point is a low point goying flat of, and within it, on the n. side of the river standeth also some buildings. Before the river lyeth a barre of quicksand, which lieth off from the north point, where this ships may goe in over with a spring tyde, through a Crik, els it is but for Barks and Friggats: men may anchor before it in the Roade in 16, 17, and 18 fathom.

Alarache is under the command of the King of Spaine, and is little or nothing used either by English or Dutch-men.

He that saileth alongst this coast, must not come very close to the shore, unlesse it were with a hard Levand, or easterly winde, with calme weather there goet sometimes a very great grow sea out of the west or northwest, so that sometimes men can hardly get of from the shore.

From Alarache to Old Mamora the coast lieth s. and by w. and s. w. betwixt 7 or 8 leagues, it is low land with sandhills with few places that are good to be knowen, all alongst even to Mamora.

He that cometh out of the sea, and falleth with the land here on this coast, shall perceive little knowledge of the land, unlesse hee shall with some of the inhabited places. This Old Mamora was wont also to be a haven, but is now altogether cast to off the sea.

Of the Tydes and Courses of the streames:

Before the Condaet on the coast a f. w. & n. n. e. moon maketh high water: Before Palos Moguer and Wolues maketh full sea a fourth and n. moon. Before the river of S. Lucas and at Cales before the bay maketh full sea a f. w. and by south and northeast and by north moon. At Cales in the bay maketh high water a f. w. moone. The ebb falleth without the Puercos to the s. wardes towards the Straet, and the flood towards the land to the northwards: but for the most part, the flood falleth thwart in to the land, about the havens. In the narrow of the Strait maketh high water a f. w. and by south moon. The current runneth more to the westwards then to the eastwards; when it is faire weather there goeth commonly 4 houres flood to the eastwards, and 8 houres ebb to the westwards, but the most part of the time according as the winde is, and at some thime the current runneth so strong, that it rippleth as if there where should.

Courses and Distances.

From Ayemoht to Leep east and by north	7 leagues
From Leep to Saltees or Palos, east and by south	7 leagues
From Saltees to the river of S. Lucas, or Sipiona s. e. and f. e. and by east 8 or 9 leagues.	
From S. Lucas or the poynt of Sipiona, to the poynt of Cales the course is southeast	9 leagues
From Cales to the poynt of the Strait southsoutheast	10 leagues
From Cales to the great Canaries southwest	140 leagues
From Cales to the Ile de Madera w. f. w.	200 leagues
From cape Trafalgar to Tariffe, the course is south east	4 leagues
From Tariffe to the point of Gibraltar east and by north	5 leagues
From the poynt of Gibraltar to Marmels n. e. and by n.	12 leagues
From Marveles to Fangerola e. n. e.	5 leagues
From Fangerola to the w. point of Mallaga e. n. e.	2 leagues
From the west point of Mallaga to the towne of Mallaga n. e. and n. e. and by north	4 leagues

Porques.

Marks off the roade Tetuan.

C. Tetuan.

Arzila.

Alaracha.

The Sea coasts off Barbarie, lying over against.

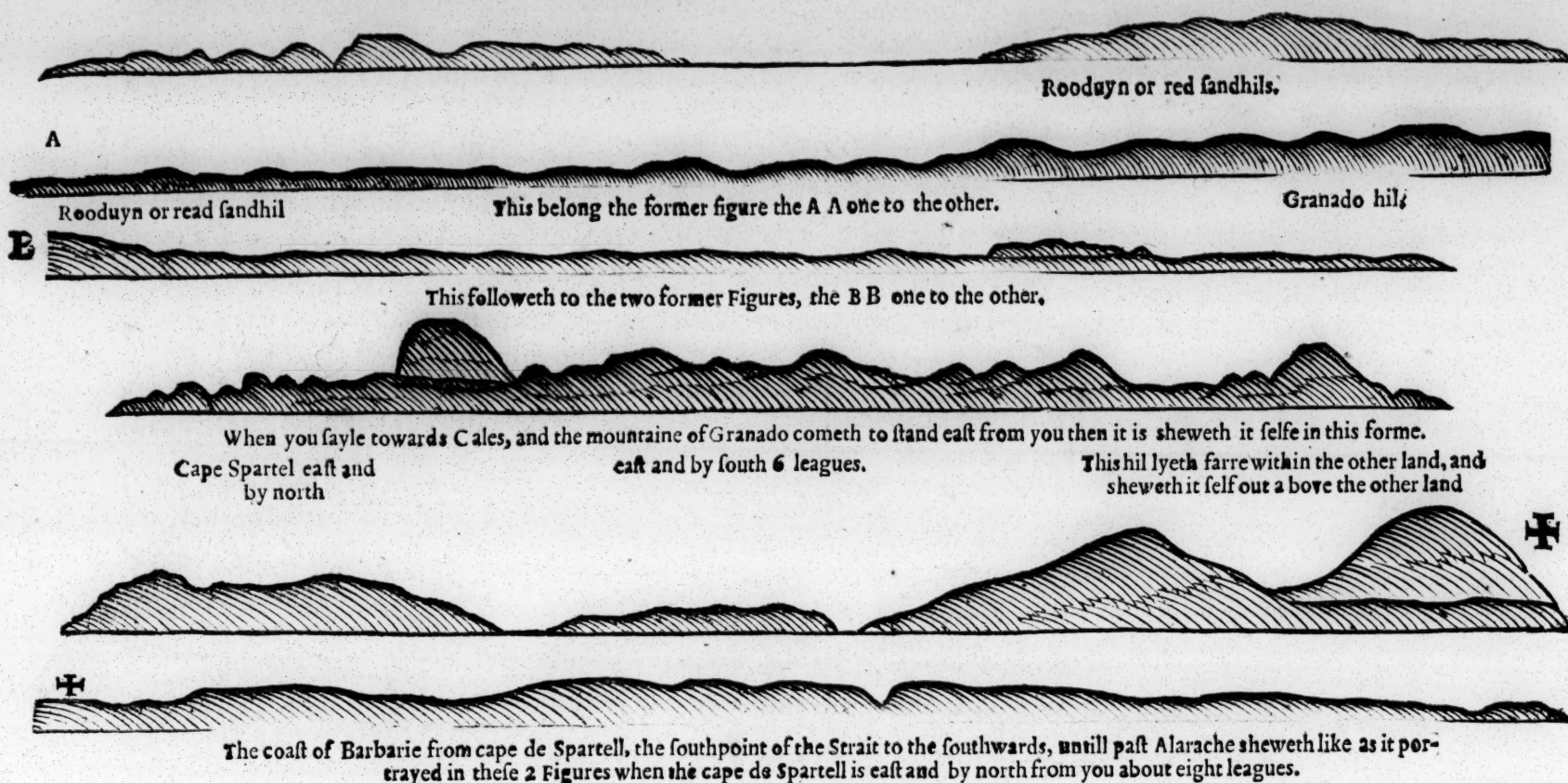
From the point of Gibraltar to Malla n. e.	23 or 24 leagues	From the point of Gibraltar to cape de Gat e. and by n.	66 leagues
From Malla to Veles malaga e. and e. and by n.	7 leagues	From cape de Spartell in Barbary to the point of Apehill, the course is east north east	8 leagues
From Veles malaga to Almunecar east	15 or 16 leagues	From Apehill to the point of Seuta f. e. and by e.	2 leagues
From Almunecar to Salobrena east	4 leagues	From the point of Seuta to the road of Tetuan f.	5 or 6 leagues
From Salobrena to Modril east and by north	2 leagues		
From Modril to cape de Sacraftye. f. e.	1 leagues		
From cape de Sacraftye to Castell de Fierro e. and by n.	4 leagues		
From Castell de Fierro to Adera east	8 leagues		
From Adera to Almeria northeast	5 leagues		
From Almeria to cape de Gat f. e.	5 or 6 leagues		

Heights.

The coast of the Condaet lyeth in 37 degr. and 19 or 20 min.
The Island Cales in 26 degr. 30 minut. The middest of the Strait of Gibraltar lyeth in 35 degr. and 50 min. Cape de Spartell lyeth in 25 degr. 32 min.

How these Lands doe shew them selves at sea.

The land betwixt Welues and the River of S. Lucas, sheweth it selfe when you sayle alongst by it like as is portrayed in these three figures following.
Black land to the northwards of the Rooduyn or the red sand-hills.



The sixth demonstration,

In which Are shewed the coastes off Barbarie from old Mamora to C. de Geer, together with the Flemis flands.

Mamora:

FROM Old Mamora to Mamora, the coast lieth alongst south and by west and southsouthwest 7 leagues. Before Mamora is a high broad sandstrand, and is not good to know, when you are somewhat off the land. The best knowledge thereof is this: When you come from the northwards alongst the shore, you have al high land within, that you come leese when you come before Mamora, and when you come from the northwards, you cannot see the river of Mamora open before you bee past it, by reason that it lieth in to the eastwards, and the n. point is low. When you come somewhat close by the shore, you shall see upon the high land in the castle of Mamora (which the Spaniards have built there for the defence of the place) a very high mast or stake, which you may see indifferent far off, and when it is cleare weather you may see also the high thick Tower of Salley to the southwards stand against the land. Before the river lieth a Barre which with a Spring hath 16 and 17 foote, and sometimes more water, the Barre is oftentimes altred by the sea. In the spring it lieth in commonly e.s.e. & thereabouts. In the later part of the yeare it lieth in more easterly by the casting up of the sea out of the n. In the Summer the windes blow alongst the coast, the most part of the time out of the north, which causeth that the currēt runneth there to the southwards, & in the winter they blow much and strong out of the f. w. and f. s. w. In the winter men must be very carefull to get of betimes when the winde beginneth to come to the south, or f. e. then it is time to get off for then commonly it shifteth to the f. w. and w. f. w. with foule weather, but when it commeth about againe to the westnorthwest, or northwest, then it is like to be good weather againe.

Road before Mamora.

The road before Mamora is about a league from the land in 18 and 20 fathom, there is clean sandy-ground.

From Mamora to Salley, the coast lieth f. w. and by f. and f. f. w. six leagues, betwixt them both it low plaine land, and sandy-strand, with double land within, which is so even and smooth, as if it were planed over. From Mamora not halfe wayes to Sally, the strand ceaseth, and from thence forth to the southwards it is a shore all of black steepe ragged rockes

with little hille, so that men cannot judge (when they are somewhat of the land) that is double land within, by the plaines off it. When you are a league or two past Mamora, then you may see very plaine the high thick Tower of Sally, and when you see the foresaid rocky shore you may be sure that you are past Mamora, that steepe rocky shore continueth from thence, until past Fedalle, yet betwixt Fedalle and Sally is here and there a place of white strand, betwixt the rockes, but to the northwards off Salley it is not so, but nothing else then perfect rockes.

The Towne of Salley hath a little Tower, and lieth upon the n. side of the river, which is a low plain point of sand. The Castle hath also a little Tower, and lieth over against upon the S. point of the River, which is a high rocky point. There goeth a wall round about the high thick Tower, and lieth upon a point on the f. side within the River. Before the River is a Barre which oftentimes with storms out of the sea doth alter ander hift, & is cast to, sometimes the channell runneth by one of the two points, and sometimes againe right in the middest off the rivers mouth. Hee that will anchor before Salley, let him bring the foresaid high thick tower (which standeth within on the River) on the point of the castle, to wit, over the south point of the River, which shall then stand from him neere about southeast, and anchor there in thirty, eight and twenty, 24, 20, 18, or 16 fathom, so neere or farre of as hee will, there is clean black sandy-ground, neverthelesse that the shore thereabouts is so full of rocks and stones. Being come to anchor there men must shoot a shot to cause the Moores to come of. From Salley to the Island Fedalle the shore lieth alongst S. W. and by f. about 9 or 10 leagues betwixt them both lye in the sand-strand, long black rocks (as before is said) so that off ten times men might take it to be Fedalle. The best markes for to know Fedalle by is a wood of trees about a league to the northwards off Fedalle, which standeth below upon the land and sheweth like a barne. When you come sayling alongst close by the land, you shall see it above upon the land, but when you are somewhat off from the land, then you shall see the land within, in above the wood of trees (or Barne as men doe commonly

Salley

Fedalle

monly name it for the likenesse of it) also there lyeth a little round hommock about foure leagues tho the northwardes of Fedalle, which you shall see above the rest of the land, when you are somewhat off from the land, but when you come close by the land, it hideth it selfe also behinde the double land. The coast betwixt Salley and Fedalle, is very plain and smooth double land, so that there is not another such hommocke more betwixt them both, as that foresayd hommocke, and in regard the coast thereabouts is altogether so plain, without any places good to beknowne, there fore men must take the more speciall heed unto such small markes, for not to sayle past the place were they are bound unto.

Monfor. Betwixt the foresayd Barne or wood of trees and Fedalle standeth also a ruinous little Towne fallen downe, in a rough wood, called Monfor, when you sayle alongst close by it, you shall see yet some peeces of walles of it.

Road under Fedalle. Tho the southwards of Fedalle the land is agayne higher, and where the high and low commeth together, it doth make a clift, there by the island of Fedalle is good to be known. when that clift is s. f. e. from you, then is Fedalle thwart of it also s. f. e. from you. If you will goe into Fedalle, then runne right with the foresayd Barne, or wood of trees, untill you come within a league, or somewhat neere to the land, and then alongst by it, and so you shall not misse the island Fedalle, but runne in betwixt it and the maine land, when that you come by the north poynt of Fedalle, then anchor betwixt the strand and the foresayd north point, but much neerer the island Fedalle then the strand in six, seven or eight fathom, so that you come to lye with your shippe so farre in, that foresayd point of the island doe lye n. n. w. from you, then lyeth the foresayd Barne e. n. e. from you, and Monfor a handspikes length tho the northwards of the Barn or wood of trees; yon may also anchor in 12 fathom, so that the poynt off Fedalle lye west and by south from you.

This bight within the island Fedalle, is a very bad place to lye in, for although you lye there so that the poynt off the island lye northwest, and north and by west from you, and with a cable on the island, neverthelesse the grown sea commeth so hard rowling in about the poynt of the island (when the winde is westerly) that you might rather desire to lye in the open sea, then within the island. From the north point of Fedalles shooteth of a ledge or riffe off rockes a Musket shot into sea, the most of them lye high above water, within the island it is very flat towards the strand, the Bay on the land is a faire sandy strand, there men may get ballast from the shore, but they must bee very carefull to stand upon their guard, for there are dangerous people.

Depths & grounds about Fedalle. Before Fedalle, to wit, to the northwards off it, thwart of the wood of trees, and alongst to Salley, it is allshold water a league or two from the land, all alongst that distance, of it is not deeper then 23, 24, and 25 fathom cleane sand-ground, thwart of into sea from Fedalle it is also of the same depth, but foule ground.

He that will trade at Fedalle must anchor somewhat farre in, for they have there no Boats, men must fetch the Mores aboard with the Boat.

Upon the n. point of Fedalle lieth a high hommock, which sheweth a far off when men come in, as if it were a castle false downe, but it is nothing else then rocks. At the s. end of Fedalle men may goe over on foot at low water to the maine land, but at high water sea washet through at 2 places, it floweth there 7 and 8 foot up and down.

Anafee. Three leagues s. w. and by s. and s. w. From Fedalle lieth an old ruinous town fallen downe close upon the strand called Anafee, it is a ling town with many towers, amongst the rest one high thick tower al most like the tower of Salley, but men must bee indifferent close by it before you can see it. When you are thwart of Anafee, you may yet see the wood of trees to the northwards of Fedalle, which standeth then to see to from far as a sayle in the water, 2 leagues to the southwards, (or rather to the westwards) of Anafee, or Anafee, is a steepe point with red cliffs, wich seem a far off as if they were houses, such spotters men shall find at divers places on the coast.

Azamor. From Anafee to Azamor the coast lieth s. w. and by w. westerly 18 leagues betwixt them both lieth another fallen place called Lyones. Azamor hath apoint lying out on the e. side when you come sayling alongst the shoare from the northwards, Azamor lieth then about or behinde that point upon the strand, but standeth high. A little past Azamor lieth a river, and thereabouts are some towers in the low-land.

Masagam. Three little leagues to the westwards of Azamor lieth the town of Masagam, on a white strand close by the sea side this town is inhabited by the Portugals, or Spaniards, it hat no to-

wers, and sheweth to see to off at sea, in white spots against the land. When you are thwart off from it, you shall see to the southwards the high tower of Tyro (which is a town fallen down about 2 leagues to the westwards of Masagam) almost like the tower of Anafee. A little to the westwards of masagam, at the westpoint of the Bay, shooteth off a ledge or riffe of rocks, almost a league off into sea, where of the rockes at high water, lie most under water, and at low water are uncovered. He that will anchor there, and is not well acquainted, must take in a Pilot, which may bring him to a place where is good anchor ground, for although that it be a great Bay, yet neverthelesse there are few places where the ground is clean; but is at many places foule, so that but few ships should beable to lye there in clean ground, when you lie in the right road, then lieth the east point of the Bay east, and the west point about n. w. from you.

About a leagues to the westwards of Tito, lieth a steep point, when you come from the eastwards alongst by the shoare, you shall see no more land without the point, untill that you come near it, when you begin to get it upon your broad side, then there cometh out to the westwards a great square cliff, which is very good to be known, & is whitish with reddish spots, and seemeth a ar off as it were a wall. This point is called after that white point, Cape Blanco, About 3 leagues tho the westwards of this Cape Blanco, lieth a little tower upon the high land, near by a valley called Casa Cavalgera, and two leagues more to the westwards lieth upon the high land another little house called Emindra, but you must be close by the land before that you can see it. From the foresaid C. Blanco tho the C. Cantin, the coast lieth w. s. w. and s. w. and by west about 9 leagues..

The C. Cantin is an even plaine point, when you are to the northwards of it, it sheweth flat to wards the west, and going off towards the sea: there standeth a fire-tower upon it, but very small, that sometimes you can hardly see it. If you come from the northwards, or from C. Vincent, and are bound to Safia, then seth your course s. and s. and by east, and then you shall fall with the land 4 or 5 leagues to the eastwards of Cape Cantin, or if you saile a more westerley course you shall runne till you come in the height of 32 degrees and a half, and then the C. Cantin shall lie due e. from you, it is better to fall a little to the eastwards of the C. then to the westwards of it, because the winds blow there most common northerly. If you fall to the eastwards of the C. the coast lieth there s. w. and by w. and w. s. w. and it is even plaine land. About 10 leagues to the eastwards of the C. lieth that little town Tyro, with a high white tower upon the sea side, and 5 or 6 leagues more to the westwards (betwixt Casa Cavalgero and C. Cantin) you shall see a little bight or bay, thereabouts lie upon the strand by the water side, great black rockes, which shew as if they were wrakes of ships, and then forth alongst to the C. it is a faire flat sandy strand from the C. shooteth off a ledge of rocks somewhat of into sea, which men must avoid when then sayle about the Cape.

From C. Cantin tho the n. point of Safia, the coast lieth s. or somewhat more westerley. 5 or 6 leagues, betwixt them both it is a steep rocky land without sandy strand, but above upon it plaine and even. A league to the southwards of the C. lieth a riffe or shold by the shore, by some called the Gold-bancke and lieth about a league off from the land: at some times of the year there is much fish to be taken.

Tho the southwards of the Bay of Safia is high uneven, and Safia, most of all double land but to the southwards of it, it is even and plain, therby men may easily perceive or discern whether they be to the northwards of Safia, or to the southwards of it.

If you will anchor in the bay or road before Safia, then bring the north point (whereupon standeth a tower) a little more westerley then n. from you, and anchor then in 18 fathom. Or if you will anchor further in the bay, then bring the foresaid n. point n. n. w. or a little more northerly from you, and then the northermost of the two north points shall bee a shippes length without the southermost or the next unto you, run then so farre to the southwards untill that tower where men doe land with the boats (which is a high square tower, standing below even within the wal of the towne) come right over a tower which ist fast to the wall, which commeth of from the Castle above to the southwards, so that the foresaid thicke tower below come right over the Haven betwixt the poynt where the castle standeth upon the water side; and the rocks where men goe in betwixt. Or else anchor that the high Castle of Safia stand e. and by s. and e. s. e. from you, there it is sixteene, seventeene, & eighteene fathom deepe, good fine sandy ground. You may also anchor so farre within in the Bay in 15 or 16 fathom, that the north poynt come te be n. w. & n. w. and by w. from

Tyro.

C. Blanco.
Casa Cavalgera.

Emindra.
C. Cantin.

For to anchor in the Bay off Safia.

from you. These are the Summer road. In the Winter men must anchor further from the land in 28 or 30 fathom, there the ground is coufe sand. Men may boldly run in before Safia into the road by night, there is nothing that they need to feare, which may doe them hurt, but the land.

About 2 leagues from Safia, lieth the f. point of the bay, which is a low point that lieth out, and two leagues to the southwards of it lieth another steep rocky point without sandy strand. By it goeth in the River Tanfit up into the land unto Marrocos.

From the poynt of Safia to the Iland Mogodor, the coast lyeth f. f. w. 19 or 20 leagues.

Iland mogodor.

Against the northeast end of the Iland Mogodor, there shooteth off from the maine land, a great row off rockes; being hardsharpe rockes, whereof the outtermost, or those that lye next to the Iland Mogodor, lye high above water: He that commeth from the northwards, and wil saile in behind the Iland Mogodor, must runne in betwixt the Iland and the foresaid rockes, close in alongst by the Rocks. It is there in coming in, betwixt the Iland and the Rockes five fathom deep. Within the foresaid rocks lye also some other Rockes on the larboard side, which at high water are under water, and at low water are encovered. When you come to the end off them, you may luffe up about by them towards the maine land, and anchor there within them in three fathom at low water, there is good sand-ground. But yet neverthelesse it is not there very good lying, for by reason off the breaking off the Sea upon the foresayd rocks, there goeth sometimes a great Sea, so that it is not good lying there with at storme, but further in, under the Iland it is good lying in two fathom and a halfe. From the south end of the Iland lyeth off a little riffe towards the maine land almost thoe the foot strand, and to the southwards off the foresayd little riffe, lyeth a bancke off from the maine land almost a league of into sea. If you will sayle out at the south end, then run alongst by the shoare of the maine land, untill that you bee about the foresayd riffe; and run out then upon your lead alongst by the banck, and then you shall presently get deeper water, of 4, 6, 8, and 10 fathom, and then you may saile there, where you desire to be.

C. de Geer. From the point of Safia to C. de Geer, the course is south-southwest about 43 leagues but from Mogodor the same course about 22 or 23 leagues. It is there betwixt them bot a faire flat sand-strand, with double land, which a some places is very high.

C. de Taffalana.

About eight leagues to the northwards of C. de Geer lyeth a point called C. de Taffalana, under which men may ride in good sand-ground for east and northeast windes. The C. de Geer is lower then the land to the northwards of it, and falleth to the southwards flat of into sea, which men shall first perceive when they come within 3 or 4 leagues of it. About 4 leagues to the northwards of the Cape lyeth a high Hommocke within the land, and further northwards the Land is yet higher; but when you come thus from the northwards near C. de Geer, you shall see no more land to the southwards of it. When you come to the point you must give the riffe a birth that lieth off from it, and runne about by it; and then forth southeast and by east, and southelt, 7 or 8 leagues to S. Cruz, and then you shall see the Moores Castle stand on the high land: thwart of it lie a row of Rockes, about a Calliver shot in length, else it is all a cleane and cleare coast. For to anchor there in the Bay, runne so farre into the Bay, that the foresaid Moores Castle stand north from you, and the Christians packhouses northeast, there it shall be deepe (to the southwards or the foresaid row of Rocks) 7 and 8 fathom, the north point or Cape de Geer, shal then be from you northwest and by west, there is the best road. In the Summer time you may anchor nearer to the shoare, untill you come in 6 and 7 fathom. When you saile from Cape de Geer towards the playe or the Road, you must be carefull to keepe cloose aboard of the land of the Cape, and run alongst by it, untill you come before the Castle. If you runne farre off from the shoare, you shall with northerley windes (which blow there much) be constrained to come in northeast, and northnortheast, again for to recover the shoare, therefore it is best to keepe close aboard the high land. He that should come into the road here by night, must not (upon certain great forfeiture) come nearer the shoare then in 12 or 14 fathom.

Riffe of cape de Geer.

Road before S. Cruz.

In this Road must be very carefull and ready with their ankors, the smallest bower must be alwayes laid out for the wind which bloweth of the land, and the other ankors to Seawards. The shoot anchor must bee alwayes ready against a storme (which men may very well perceive before by the swelling or rising of the sea) to bring it out in the southwest. Also

it is needfull to keepe the foresaid to the yard, for to helpe themselves with it the best that they can if it should happen should be forced from their ankors.

In this Bay is much fish to be taken, when men lye there in the road, they take their turnes to go out to fish.

From the C. S. Vincent South-West and by West 140 leagues, and from the cape de Finisterre southsouthwest and south west and by south 232 leagues, lyeth the Iland Porto Santo lying southeast and northwest upon each end of this Iland lieth a great rock. The road is on the southwest side, to the eastwards of the ragged rock, before a little haven where men may landlocks with boats.

The Iland Madera lieth from Porto Santo f. w. 16 leagues mader. southwards from the east boint of Madera, lie 3 small rocky islands, being called the Serters, the northernmost is the smallest, and lieth about a league from the land from the foresaid point, the southernmost is the greatest, and lyeth foure leagues from the land. Hee that commeth from the northwards, or from Porto Santo, may saile through betwixt them and the point of Madera, it is there betwixt them broad and wide, and also cleane and cleare every where, onely at the foresaid east point of Madera lieth a suncken rock, whereof men must take heed.

At the south side of the Iland before the towne S. Cruz is a good road in 20 fathom, but before Fonsall is the chiefeft Road for to lade: to the westwards of the Towne lieth a great rock with a crosse, called the Lion, by is the best lying in 30 or 40 fathom.

At the southwest side before Marafilo is also good anking in sixteene or eighteen fathom. In all these foresaid places is good ground for to anchor in.

Betwixt Madera and Teneriffe lieth the little Iland Salva-Salvager, ges, to wit, south from the Serters forty leagues. North from the northeast poynt of Teneriffe seven and twenty leagues, and northnorthwest from the northeast point of great Canaries, forty, or two and forty leagues, it lyeth southwest and northeast and is about a halfe league long. The southwest end of Salvages is foule farre of into sea, therefore runne rather about to the eastwards of it then to the westwards. Three or 4 leagues southwest from that point, amongst other Rockes, lyeth one great rock which sheweth a for of like a saile. Under the southeast side of the Salvages is a good road for a northwest and west wind.

Madera and the Iland S. Michaels lye northwest and south-S. michiels east 135 leagues distant. At S. Michaels, the road is at the southwest side of the Iland, when you come about one off the two points, either from the east or west, then you shall see two little towns. Before the westernmost, called Punte de Gada, or Punt Alagato, is the Road in 20 and 25 fathom.

Before the easternmost little towne lyeth a little Iland, betwixt that and the land of S. Michaels it is 5, 6, and 7 fathom deep. Betwixt these two little townes, the coast lyeth west-northwest and eastsoutheast.

From S. Michaels to Tercera, the course is northwest and by west foure and thirty leagues. Under Tercera the road is on the south side of the Iland, to the westwards of the rockes, right before the towne Angra, betwixt two points that lye out, upon each of them standeth a Castle for defence of the shippes which lye there in the Road, the westernmost of the 2 points lyeth a good wayes further out to seawards then the easternmost, and hath upon the end of it, two very high, called Brasil, when you come out of the sea, either from the east wards or the westwards, it seemeth a farre of as if it were asunder from the land. These two foresayd hills upon the poynt of Brasil, are so high, that in cleare weather men may see from thence 16 or 17 leagues farre of into sea. Upon it stand two pillars, which men may see every where in the towne Angra, and a watchman thereby for to keepe watch, and to give them of the towne warning of the shippes that come about the Iland. As many ships as hee seeth come from the westwards or the southwards, that is, from the West-Indies, Brasil, or the Portingals Indies, so many Flags he setteth up upon the Pillar towards the west, when he seeth more then five ships, then he seeteth up a great Flagge, which signifieth a whole Fleet. Likewise he doth the same upon the other Pillar towards the east, for the shippes which he seeth come from the east, from Portingall or from the northwards, so that there cannot a shippe come thereabout, but men may see it presently by that token in every corner & street of the towne.

He that cometh from the eastwards, or the northwards, and is bound into the Road off Tercera, let him run faire by the land of the east point, and alongst by it unto the 2 little Ilands, called the Ilheos, which lye a little to the eastwards off the

Porto Santo.

Serters.

S. Cruz.

punto de Gado.

Tercera.

Angra.

Porto Saile into the road of Tercera.

the road, about a bow shot one from the other. Men may run a-longst to the southwards off these Ilands, or to the northwards of them, as they will, and also betwixt them both. Betwixt these little Ilands and the maine land of Tercera, it is a great cannon shot broad, and 15 and 16 fathom deepe, thorow betwixt the little Iland it is five and 6 fathom deepe cleane sand-ground. Somewhat the seawards of these little Ilands, lie 3 or 4 rocks above water, called Los Frayles. Being past these foresaid little Ilands, you must saile to the westwards, until that you come neare to the foresaid point of Bravill, a little to the eastwards of it you must anchor before the town of Angra in 10 or 12 fathom, or else men lay their sea-anchor commonly in 16, and their smaller anchor towards the land in 8 or 9 fathom. Men lye there landlockt for a southwest and northeast and also for an E. N. E. winde, but a S. E. winde bloweth there flat open in. On the westside of the point of Brazill is also a great sandy Bay for to anchor in. Before a village, called S. Martin.

Three leagues to the eastwards of the Towne Angra, lieth a bight, called Porto Judeo, there the Spaniards landed with their forces, when they tooke in the Iland from the Portingals.

Hee that will saile from Tercera to Fayall let him set his course W. S. W. to the E. point of S. Georges, which is from thence ten leagues asunder. Further betwixt the Pico & S. Georges through to Fayal are 16 leagues it lieth most W. N. W. through betwixt them and the Iland Fayall lieth to the westwards of the Iland of the Pico a great league asunder of from it.

He that will anchor in the Road of Fayall, let him anchor right before the village of Fayall in 14 or 15 fathom, there is sandground; but there goeth a hard tide of flood and ebb.

On the f. w. end of the Iland Fayall lieth a little haven; for

to saile in there, you must run in by the S. W. point, so long about by the shore, untill that you see the haven open, saile a-longst about by the S. west point untill that you come in the narrow, betwixt the rocks which lie off from the West side, so soone as you come within the rockes, let presently your anchor fall in 5 fathom, and bring Hawfers on the eastside on land, fast to the pales, which are there made for the purpose: the haven is little so that men may lie in it with no more then with 4 or 5 ships. Further in it is should water.

Off the Tydes and Courses of the streames.

On the foresaid coasts maketh high water a S. S. W. and S. W. and by S. moon

Courses and Distances.

From cape Spartell to cape Cantin it is Southwest southerly.	65 leagues
From cape Spartell to Madera w. and by south and west f. w.	200 leagues
From cape Cantin to Madera west	133 leagues
From cape Cantin to S. Vincent N, somewhat westerly	90 leagues
From cape Cantin to Teneriffe S. west and by west	142 leagues
From cape Cantin to cape de Geer southsouthwest	50 or 52 leagues
From cape de Geer to cape de Non south f. w. and f. by w.	27 leagues
From cape de Geer to the point of S. Cruz southeast	5 leagues
From cape de Non to Ofsin south	13 leagues
From cape de Non to cape de Bajador S. W. and by west	69 leagues
From cape de Geer to cape de Bajador f. w. somewhat westerly,	93 leagues
From Safia to Madera east and west	130 leagues
From cape de Geer to Madera west northwest	133 leagues
From S. Michiels to Tercera northwest and by west	34 leagues
From Tercera to the east end of S. Georges w. f. w.	10 leagues
From the east end of S. Georges to Fayal w. n. w.	16 leagues
From Saint Michaels to de cape de Finisterre e. n. e.	247 leagues
From Tercera to Roxent, or the River of Lisbon east at least,	267 leagues
From Tercera to cape de Finisterre e. n. e. and east and by north	280 leagues
From Tercera to the Lizart northeast and by east.	287 leagues

Heights.

Mafagam lyeth in	32 degr. 46. min.
C. de Cantin lieth in	32 degr. 31 min. the Iland Mogodor in 31 degr. 8 min.
C. de Geer in	30 degr. G. de Non in 28 degr. 32 m. C. de Bajador in 27 degr.

How these Lands doe shew them selves at Sea.

Cafa Cavalgero.



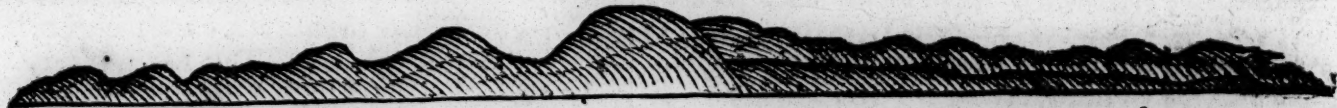
Thus sheweth the land betwixt Mafagam and cape Cantin.



Thus sheweth it selfe Cafa Cavalgero, when it is south from you 6 leagues.



When cape Cantin is northeast and by east 6 leagues, and the point of Safia eastsoutheast 4 leagues from you, then they shew themselves thus.

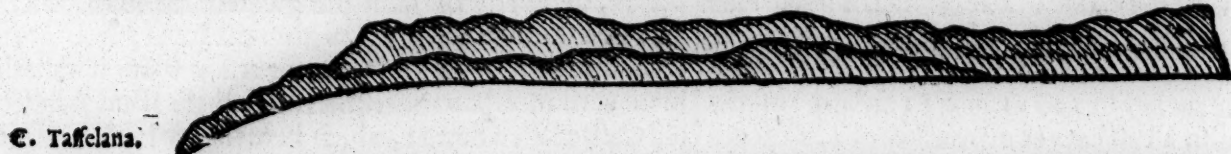


Thus sheweth the land to the southwards of the south point of the bay of Safia, when it is eastsoutheast 3 leagues from you



Mogodor.

When you are westnorthwest or thwart of from Mogodor, 3 leagues, then sheweth it selfe thus. It is a high and double land,



C. Tasselana.

When the cape de Tasselana is northnortheast 3 leagues from you, the land sheweth thus unto cape de Geer.



C. de Geer.

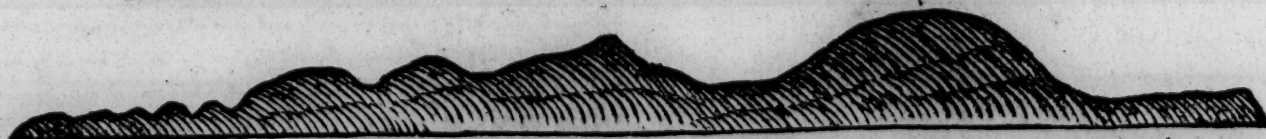
When cape de Geer is northnorthwest 3 leagues from you, it sheweth thus and then the bay is east and by south from you, the land is with sand-hills.



Thus sheweth the Iland S. Michaels on the north side.



Thus sheweth the Iland of Tercera, when it lyeth east and by south about 7 leagues from you,



When Tercera is 4 or 5 leagues from you, then it ariseth thus, the west end of this Iland Tercera is higher then the east end, thereby it is indifferent good to be know ne,

K

Thus

from you. These are the Summer road. In the Winter men must anchor further from the land in 28 or 30 fathom, there the ground is coufe sand. Men may boldly run in before Safia into the road by night, there is nothing that they need to feare, which may doe them hurt, but the land.

About 2 leagues from Safia, lieth the f. point of the bay, which is a low point that lieth out, and two leagues to the southwards of it lieth another steep rocky point without sandy strand. By it goeth in the River Tanfit up into the land unto Marrocos.

From the poynt of Safia to the Iland Mogodor, the coast lyeth f. f. w. 19 or 20 leagues.

Iland mogodor.

Against the northeast end of the Iland Mogodor, there shooteth off from the maine land, a great row off rockes, being hard sharpe rockes, whereof the outtermost, or those that lye next to the Iland Mogodor, lye high above water: He that commeth from the northwards, and wil faile in behind the Iland Mogodor, must runne in betwixt the Iland and the foresaid rockes, close in alongst by the Rocks. It is there in coming in, betwixt the Iland and the Rockes five fathom deep. Within the foresaid rocks lye also some other Rockes on the larboard side, which at high water are under water, and at low water are encovered. When you come to the end off them, you may luffe up about by them towards the maine land, and anchor there within them in three fathom at low water, there is good sand-ground. But yet neverthelesse it is not there very good lying, for by reason off the breaking off the Sea upon the foresayd rocks, there goeth sometimes a great Sea, so that it is not good lying there with at storme, but further in, under the Iland it is good lying in two fathom and a halfe. From the south end of the Iland lyeth off a little riffe towards the maine land almost thoe the foot strandt, and to the southwards off the foresayd little riffe, lyeth a bancke off from the maine land almost a league of into sea. If you will sayle out at the south end, then run alongst by the shoare of the maine land, untill that you bee about the foresayd riffe; and run out then upon your lead alongst by the banck, and then you shall presently get deeper water, of 4, 6, 8, and 10 fathom, and then you may faile there, where you desire to be.

C. de Geer.

From the point of Safia to C. de Geer, the course is south-southwest about 43 leagues but from Mogodor the same course about 22 or 23 leagues. It is there betwixt them bot a faire flat sand-strand, with double land, which a some places is very high.

C. de Taffalana.

About eight leagues to the northwards of C. de Geer lyeth a point called C. de Taffalana, under which men may ride in good sand-ground for east and northeast windes. The C. de Geer is lower then the land to the northwards of it, and falleth to the southwards flat of into sea, which men shall first perceive when they come within 3 or 4 leagues of it. About 4 leagues to the northwards of the Cape lyeth a high Hommocke within the land, and further northwards the Land is yet higher; but when you come thus from the northwards near C. de Geer, you shall see no more land to the southwards of it. When you come to the point you must give the riffe a birth that lieth off from it, and runne about by it; and then forth southeast and by east, and southelt, 7 or 8 leagues to S. Cruz, and then you shall see the Moores Castle stand on the high land: thwart of it lie a row of Rockes, about a Calliver shot in length, else it is all a cleane and cleare coast. For to anchor there in the Bay, runne so farre into the Bay, that the foresaid Moores Castle stand north from you, and the Christians packhouses northeast, there it shall be deepe (to the southwards or the foresaid row of Rocks) 7 and 8 fathom, the north point or Cape de Geer, shal then be from you northwest and by west, there is the best road. In the Summer time you may anchor nearer to the shoare, untill you come in 6 and 7 fathom. When you faile from Cape de Geer towards the playe or the Road, you must be carefull to keepe cloose aboard of the land of the Cape, and run alongst by it, untill you come before the Castle. If you runne farre off from the shoare, you shall with northerley windes (which blow there much) be constrained to come in northeast, and northnortheast, again for to recover the shoare, therefore it is best to keep close aboard the high land. He that should come into the road here by night, must not (upon certain great forfeiture) come nearer the shoare then in 12 or 14 fathom.

Riffe of cape de Geer.

Road before S. Cruz.

In this Road must be very carefull and ready with their anchors, the smallest bower must be alwayes laid out for the wind which bloweth of the land, and the other anchors to Seawards. The shoot anchor must bee alwayes ready against a storme (which men may very well perceive before by the swelling or rising of the sea) to bring it out in the southwest. Also

it is needfull to keepe the foresaid to the yard, for to helpe themselves with it the best that they can if it should happen should be forced from their anchors.

In this Bay is much fish to be taken, when men lye there in the road, they take their turnes to go out to fish.

From the C. S. Vincent South-West and by West 140 leagues, and from the cape de Finisterre southsouthwest and southwest and by south 232 leagues, lyeth the Iland Porto Santo lying southeast and northwest upon each end of this Iland lieth a great rock. The road is on the southwest side, to the eastwards of the ragged rock, before a little haven where men may landlocks with boats.

The Iland Madera lieth from Porto Santo f. w. 16 leagues mad southwards from the east boint of Madera, lie 3 small rocky Ilands, being called the Serters, the northermost is the smallest, and lieth about a league from the land from the foresaid point, the southermost is the greatest, and lyeth foure leagues from the land. Hee that commeth from the northwards, or from Porto Santo, may faile through betwixt them and the point of Madera, it is there betwixt them broad and wide, and also cleane and cleare every where, onely at the foresaid east point of Madera lieth a suncken rock, whereof men must take heed.

At the south side of the Iland before the towne S. Cruz is a good road in 20 fathom, but before Fonsiall is the chiefeft Road for to lade: to the westwards of the Towne lieth a great rock with a crosse, called the Lion, by is the best lying in 30 or 40 fathom.

At the southwest side before Marafilo is also good anchoring in sixteene or eighteen fathom. In all these foresaid places is good ground for to anchor in.

Betwixt Madera and Teneriffe lieth the little Iland Salva-Salvages, to wit, south from the Serters forty leagues. North from the northeast poynt of Teneriffe seven and twenty leagues, and northnorthwest from the northeast point of great Canaries, forty, or two and forty leagues, it lyeth southwest and northeast and is about a halfe league long. The southwest end of Salvages is foule farre of into sea, therefore runne rather about to the eastwards of it then to the westwards. Three or 4 leagues southwest from that point, amongst other Rockes, lyeth one great rock which sheweth a for of like a saile. Under the southeast side of the Salvages is a good road for a northwest and west wind.

Madera and the Iland S. Michaels lye northwest and south-south-east 135 leagues distant. At S. Michaels, the road is at the southwest side of the Iland, when you come about one off the two points, either from the east or west, then you shall see two little towns. Before the westermost, called Punte de Gada, or Punt Alagato, is the Road in 20 and 25 fathom.

Before the eastermost little towne lyeth a little Iland, betwixt that and the land of S. Michaels it is 5, 6, and 7 fathom deep. Betwixt these two little townes, the coast lyeth west-northwest and eastsoutheast.

From S. Michaels to Tercera, the course is northwest and by west foure and thirty leagues. Under Tercera the road is on the south side of the Iland, to the westwards of the rockes, right before the towne Angra, betwixt two points that lye out, upon each of them standeth a Castle for defence of the shippes which lye there in the Road, the westermost of the 2 points lyeth a good wayes further out to seawards then the eastermost, and hath upon the end of it, two very high, called Brasil, when you come out of the sea, either from the eastwards or the westwards, it seemeth a farre of as if it were a funder from the land. These two foresayd hills upon the poynt of Brasil, are so high, that in cleare weather men may see from thence 16 or 17 leagues farre of into sea. Upon it stand two pillars, which men may see every where in the towne Angra, and a watchman thereby for to keepe watch, and to give them of the towne warning of the shippes that come about the Iland. As many ships as hee seeth come from the westwards or the southwards, that is, from the West-Indies, Brasil, or the Portingals Indies, so many Flags he setteth up upon the Pillar towards the west, when he seeth more then five ships, then he setteth up a great Flagge, which signifieth a whole Fleet. Likewise he doth the same upon the other Pillar towards the east, for the shippes which he seeth come from the east, from Portingall or from the northwards, so that there cannot a shippe come thereabout, but men may see it presently by that token in every corner & street of the towne.

He that cometh from the eastwards, or the northwards, and is bound into the Road off Tercera, let him run faire by the land of the east point, and alongst by it unto the 2 little Ilands, called the Ilheos, which lye a little to the eastwards off the

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Los Fray-
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the road, about a bow shot one from the other. Men may run a-longst to the southwards off these Ilands, or to the northwards of them, as they will, and also betwixt them both. Betwixt these little Ilands and the maine land of Tercera, it is a great cannon shot broad, and 15 and 16 fathom deepe, thorow betwixt the little Iland it is five and 6 fathom deepe cleane sand-ground. Somewhat the seawards of these little Ilands, lie 3 or 4 rocks above water, called Los Frayles. Being past these foresaid little Ilands, you must saile to the westwards, until that you come neare to the foresaid point of Brasill, a little to the eastwards of it you must anchor before the town of Angra in 10 or 12 fathom, or else men lay their sea-anchor commonly in 16, and their smaller anchor towards the land in 8 or 9 fathom. Men lye there landlockt for a south west and northeast and also for an E. N. E. winde, but a S. E. winde bloweth there flat open in. On the westside of the point of Brazill is also a great sandy Bay for to anchor in. Before a village, called S. Martin.

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Hee that will sayle from Tercera to Fayall let him set his course W. S. W. to the E. point of S. Georges, which is from thence ten leagues asunder. Further betwixt the Pico & S. Georges through to Fayal are 16 leagues it lieth most W. N. W. through betwixt them and the Iland Fayall lieth to the westwards of the Iland of the Pico a great league asunder of from it.

He that will anchor in the Road of Fayall, let him anchor right before the village of Fayall in 14 or 15 fathom, there is sandground, but there goeth a hard tide of flood and ebbe.

On the f. w. end of the Iland Fayall lieth a little haven, for

to sayle in there, you must run in by the S. W. point, so long about by the shore, untill that you see the haven open, saile a-longst about by the S. west point untill that you come in the narrow, betwixt the rocks which lie off from the West side, so soone as you come within the rockes, let presently your anchor fal in 5 fathom, and bring Hawsers on the eastside on land, fast to the pales, which are there made for the purpose: the haven is little so that men may lie in it with no more then with 4 or 5 ships. Further in it is should water.

Off the Tydes and Courses of the streames.

On the foresaid coasts maketh high water a S. S. W. and S. W. and by S. moon

Courses and Distances.

From cape Spartel to cape Cantin it is Southwest southerly.	65 leagues
From cape Spartell to Madera w. and by south and west f. w.	200 leagues
From cape Cantin to Madera west	133 leagues
From cape Cantin to S. Vincent N. somewhat westerly	90 leagues
From cape Cantin to Teneriffe S. west and by west	142 leagues
From cape Cantin to cape de Geer southsouthwest	50 or 52 leagues
From cape de Geer to cape de Non south f. w. and f. by w.	27 leagues
From cape de Geer to the point of S. Cruz southeast	5 leagues
From cape de Non to Olsin south	13 leagues
From cape de Non to cape de Bajador S. W. and by west	69 leagues
From cape de Geer to cape de Bajador f. w. somewhat westerly,	93 leagues
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From Tercera to the Lizart northeast and by east.	287 leagues

Heights.

Mafagam lyeth in	31 degr. 46. min.
C. de Cantin lieth in	32 degr. 31 min. the Iland Mogodor in 31 degr. 8 min.
C. de Geer in	30 degr. G. de Non in 28 degr. 32 m. C. de Bajador in 27 degr.

How these Lands doe shew themselves at Sea.

Cafa Cavalgero.



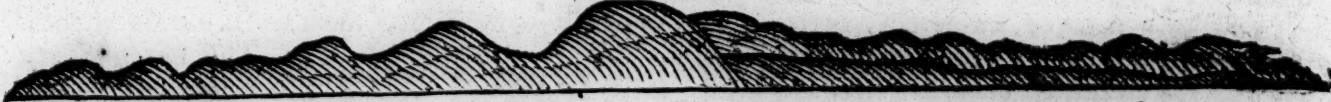
Thus sheweth the land betwixt Mafagam and cape Cantin.



Thus sheweth it selfe Cafa Cavalgero, when it is south from you 6 leagues.



When cape Cantin is northeast and by east 6 leagues, and the point of Safia eastsoutheast 4 leagues from you, then they shew themselves thus.

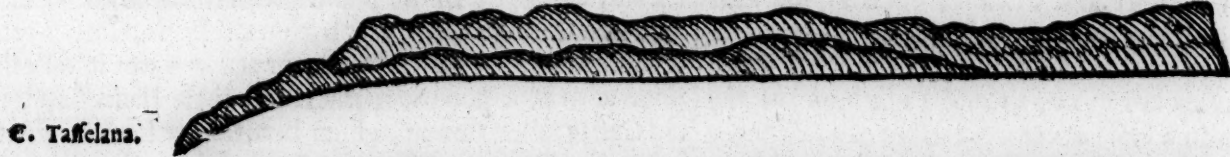


Thus sheweth the land to the southwards of the south point of the bay of Safia, when it is eastsoutheast 3 leagues from you



Mogodor.

When you are westnorthwest or thwart of from Mogodor, 3 leagues, then sheweth it selfe thus. It is a high and double land.



C. Taffelana.

When the cape de Taffelana is northnortheast 3 leagues from you, the land sheweth thus unto cape de Geer.

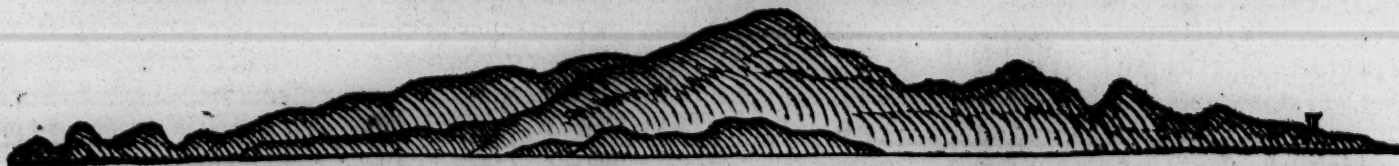


C. de Geer.

When cape de Geer is northnorthwest 3 leagues from you, it sheweth thus and then the bay is east and by south from you, the land is with sand-hills.



Thus sheweth the Iland S. Michaels on the north side.



Thus sheweth the Iland of Tercera, when it lyeth east and by south about 7 leagues from you,



When Tercera is 4 or 5 leagues from you, then it ariseth thus, the west end of this Iland Tercera is higher then the east end, thereby it is indifferent good to be knowne,

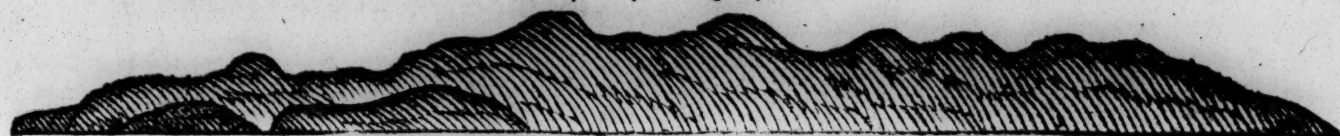
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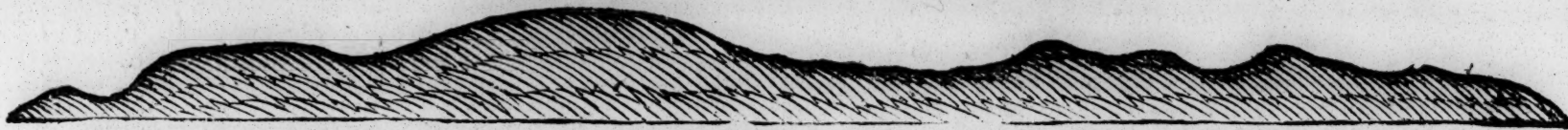
Thus sheweth Tercera on the north side.



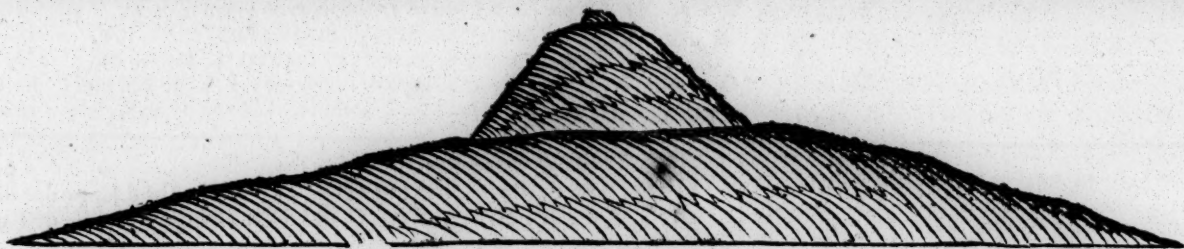
Thus sheweth Tercera on the south side when you sayle alongst by it.



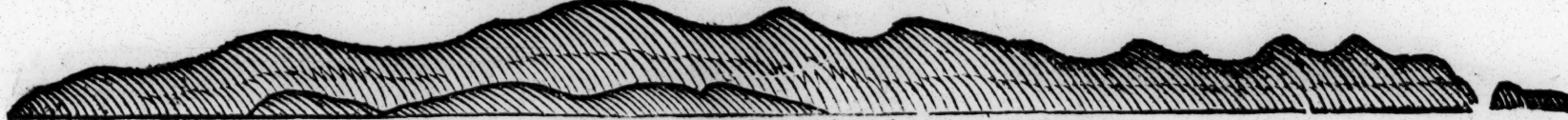
Thus sheweth the Iland S. Georges when it lyeth southsouthwest 7 leagues:



When the west end of S. Georges is fourth and by east and the east end southeast from you, it sheweth it selfe thus, being 8 or 9 leagues of from you.



When the Iland Pico is southeast from you, it sheweth it selfe thus, the high Pieck you may see about 40 leagues of from it at sea.



The Iland Fayal sheweth it selfe thus when it is fourth from you 8 or 9 leagues.



When the Iland Gratiofa lyeth westsouthwest 4 leagues from you, then it ariseth in this forme.

The seventh demonstration,

In which are to be seene the Canary Ilands.

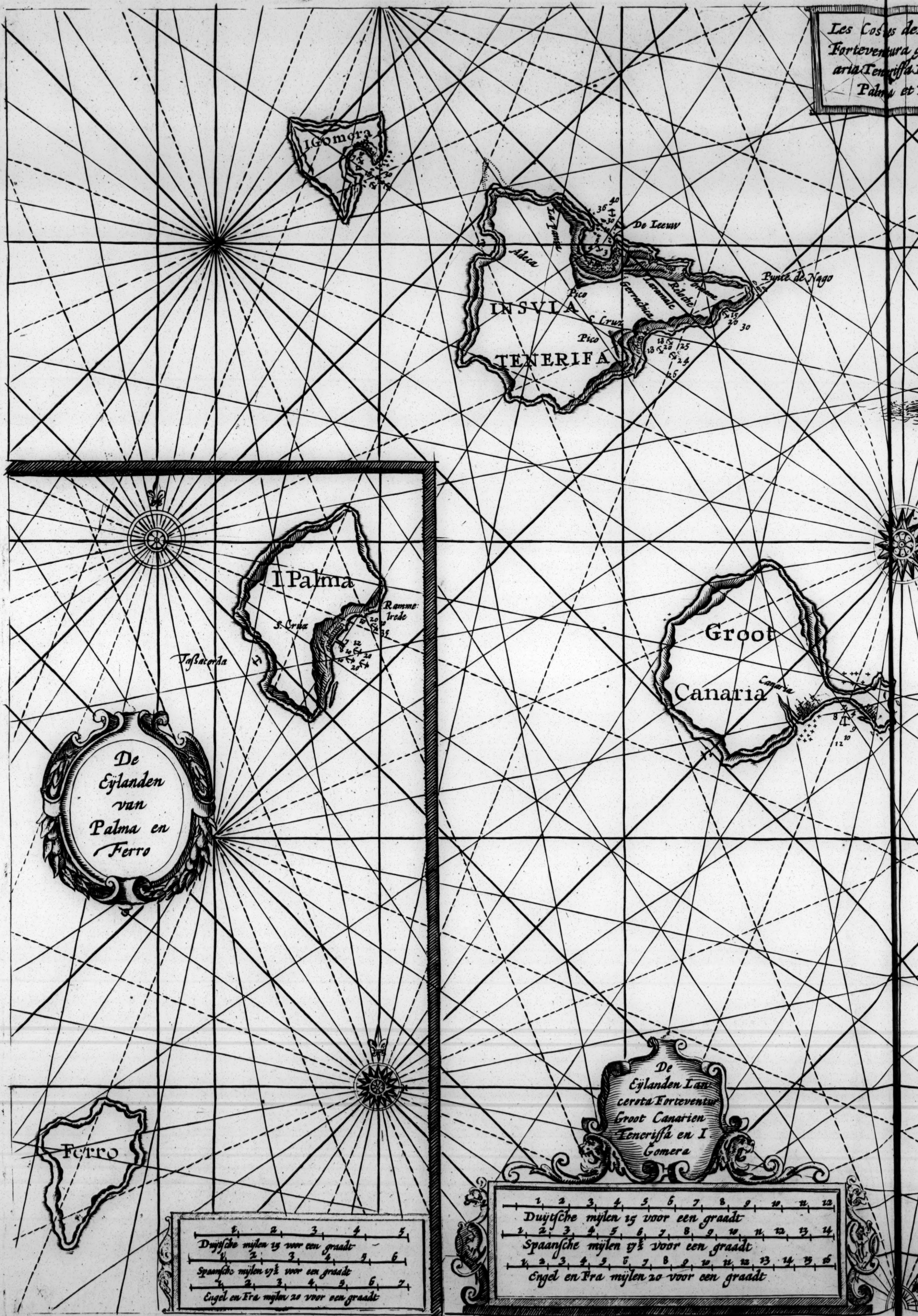
THE chiefeft Ilands of the Canaries are 7 in number, Lancerota, Forteventura, or Porteventura, great Canaries, Teneriffe, Gomera, Palma, & Ferro. The Iland Lancerota lyeth from C. S. Vincent s. f. w. distant about 165 leagues. It hath one haven upon the N. E. end, betwixt the 2 Ilands Alagrance and Grotiofa, where men may come in from the n. wards and lye landlockt for all winds, it is deep there 10, 15, and 20 fathom, and they may saile out again to the s. wards along by Lancerota. At the e. side of Lancerota is a good road before the Towne of Lancerota, there lieth a banck to the n. wards of it, which men must avoid, & run about to the s. wards of it there they may anchor in 10, 11, and 12 fathom: on the same s. e. side lye also 2 bad havens a great shot of a cast peece one from the other, the northermost is called Porto de Noas, & the southermost Porto de Cavallos, which we have demonstrated in a large volume in the n. w. corner of this card, and shewed the depths with numb. of feet at high water and spring-tide,

Porto de Naos, the deepest of these bad-havens, goeth in n. w. and by n. betwixt 2 ledges of rockes, there stand 2 beacons of heapes of stones, in manner as the waders of Norway, which you must bring and keepe one in the other, and saile so right in through betwixt the 2 foresaid ledges of rockes. The showldrest of the Barre betwixt the 2 ledges of rockes, is but a short space, a great shippes length long and is deepe at high water 7 foot, and at low water 7 foot, so soone as you shall be over, it will presently 20, 24, 26, and 28 foot deep, then you must edge up n. and then presently n. e. anchor behinde the rockes which lie to the northwards of the Barre, in the Channell the ground is rocky, hard, and uneven. If a ship should come to strike there, it should presently be broken. The ledge is so without as it is within, very steep, so that you may come very close unto it, where the anchors stand marked, it is altogether cleane sandy-ground. 30, and 34 foot deep at high with a sea wind there can

goe here a great sea, but that happeneth seldome, for the winds doe blow most out of the n. and n. e. and therefore it is almost alwayes there smooth water. This haven is very narrow betwixt the rockes which lie to seawards of you and the shore, it is but a little more then a great cables length broad, and from the havens mouth to the main land about a Cables length and a halfe. The havens mouth also is not broad, but at high water the rockes doe flow a good wayes on both sides under water, which at low water againe are uncovered.

Betwixt Porto de Naos and Porto de Cavallos lie two little Ilands, the northermost is the greatest, at high water men may goe through with boats within the lands, into Porto de Cavallos, but not with shippes, for at low water it falleth dry there within. Upon the southermost little Iland standeth an old Castle fallen downe, which here to fore hath beene spoiled by Englishmen. From the south side of that little Iland shooteth of a riffe, and to the southwards or the westwards of it lieth in the Barre, which is very narrow, not above ten fathom broad, upon the maine land stand also two little beacons, as at Porto de Naos, which you must bring one in the other, and saile so right in. At high water and spring-tide there is no more then twelve foot water, or a halfe foot more, the ground in the havens mouth is also hard, and nothing else then rocks, where you must goe in over, but within it is cleane sandground where you may lye a ground without an danger, with a shippe that draweth tenne or eleven foot water. At the highest water, the most part of the rockes on both sides of the havens mouth, lie under water, so that at many places men may goe over them with boats. At low water there remaineth in this havens mouth no more then a foot, or a foot and a halfe depth, so that a shippes boat cannot goe in; within men lie landlockt for all windes, & although it blow very hard, yet the water is alwayes smooth. In both these havens a s. and by w. and n. & by e. moone maketh high water. Neare the Havens there are no houses where Spaniards or Noores doe dwell, then only by Porto de Cavallos a little Church, where they have Masse said on Sundayes, when shippes

Les Costes de
Forteventura
aria Teneriffa
Palma et



De
Eylanden
van
Palma en
Ferro

De
Eylanden Lan-
cerota Forteventu-
Groot Canarien
Teneriffa en I.
Gomera

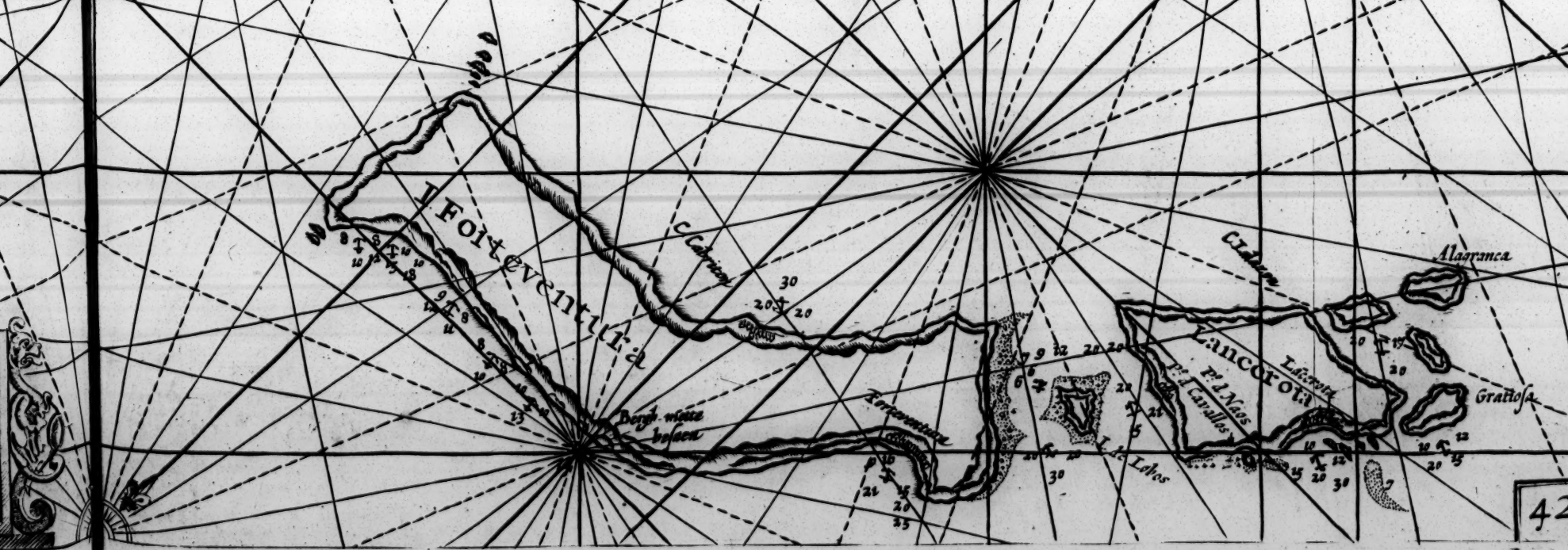
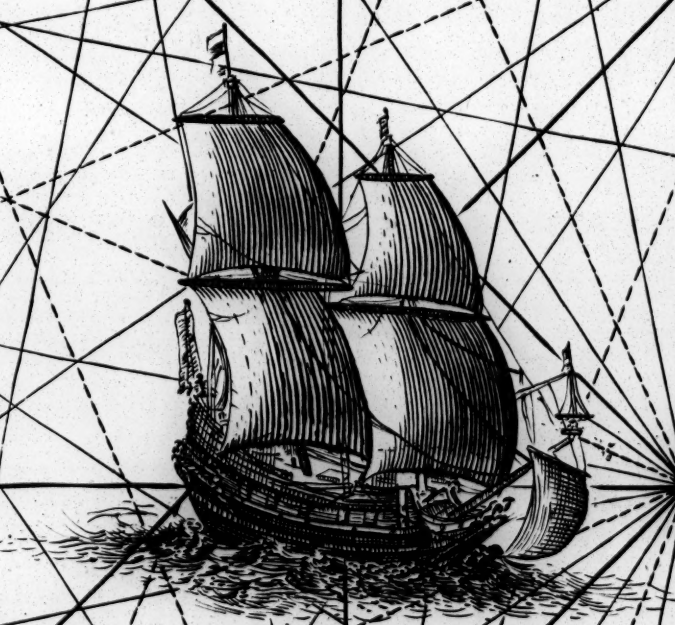
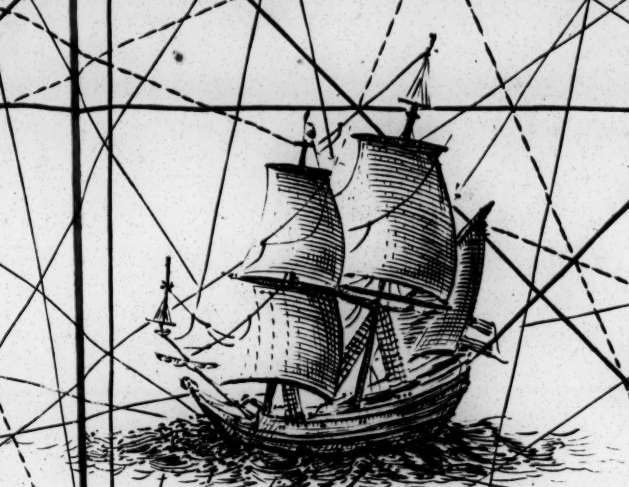
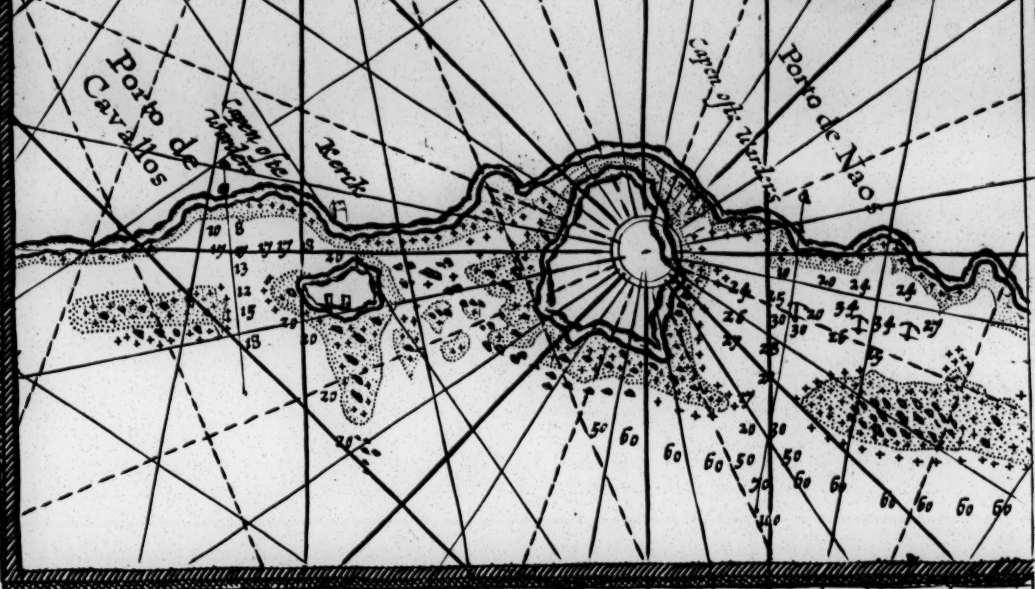
Duytsche mijlen 15 voor een graadt
Spaansche mijlen 17½ voor een graadt
Engel en Fra mijlen 20 voor een graadt

Duytsche mijlen 15 voor een graadt
Spaansche mijlen 17½ voor een graadt
Engel en Fra mijlen 20 voor een graadt

*Cosas de Lancerotta.
teventura grand Can:
a Tenriffa I. Gomera.
Palma et Ferro.*



De
Ty havens Porto
de Naos en Porto de
Cavallos aende Zuyd
Oostsyde van Lan
cerotta



shippes lie there. Men go from thence betwixt the Mountaines to the town, which lieth 3 leagues from thence. He that wil come here must provide himselfe with fresh water for there is very seldom fresh water to be gotten. Upon this land there groweth neither fruit nor wine. In some good years it giveth out Wheat, Barley, and Orilly, the Inhabitans are Mores under the command of the King of Spanie.

Betwixt Lancerota and Forteventure lieth a little Iland called Ile Lobos, which is on the outer side, to wit, on the north-west side, very foule. Men may ankor on both sides of that Iland in 15 or 20 fathom also in 6 fathom a shot of a cast peece south west and by west from the west point of the Iland, there men may lie land-lockt for all windes, except for an north west and southeast windes. The coast of Furteventura is, at the northeast end very foule, with many riffes that lie out, whereupon the sea doth break exceedingly.

The land of great Canaries lieth from Forteventura: w. 19 or 20 leagues distant. The road there lieth, at the east side of the Iland, behinde the northeast point, thwart of a Castle standeth upon a Chindle. The foresaid n. e. point, is a very high point, with a long small and low sandstrand fast to the other land; so that when it is 5 or 6 leagues n. w. or s. e. from you it seemeth to be an Iland asunder off from the other land. If you desire to go in there into the road, then saile about by that n. e. point, alongst by the Isolettes, leaving them on the starboard side of you, untill that the Castle do lie near about n. w. and by n. from you ankor there in 8, 9, 10, or 12 fathom, then lieth the north point n. e. and by n. and the s. point southsoutheast from you. At the south-end of the great Canaries is a faire sandbay called Maspalomba, there is a good road for southerly windes, and fresh water to be gotten.

The north point of the great Canaries, and the northeast point of Teneriffe called Punte de Nago, lie westnorthwest, & E. S. E. distant 21 leagues. In Teneriffe is a road on the s. east side before the town S. Cruz, there is a faire sand-bay, a little to the northwards of the town is the best road in 20, or 24 fathom, and then Punte de Nago, the N. E. point of Teneriffe lieth n. n. e. from you, and the s. point s. and by west. When the Pico of Teneriffe is w. s. w. from you, then are you open before this road of S. Cruz, and when you lie in the Road of S. Cruz, you may see the Iland of great Canaries southeast from you about 13 leagues.

On the n. w. side of Teneriffe lieth the road of Garrichica, from the n. e. point Punte de Nago w. s. w. and s. w. and by w. 8 or 9 leagues. He that will ankor before Garrichica, let him ankor to the westwards of the rock with the crosse called the Lion, so that the foresaid rock do lie s. e. and by e. and s. e. from him, then he shall lie right before the town, and may see right into the street of the town, thorow the Cloister of S. Dominicus there is clean ground in 36 or 40 fathom the Pieck lieth then over the w. side of the town, nearer to the land, or to the rock then in 35 or 36 fathom it is not cleane, and westwards towards te riffe Lapania it is also foule ground. This is a dangerous road, therefore every one that cometh here, must be very carefull to have their ankors, cables, and sailes very preedy & ready for to shift roads as soon as it beginneth to be a storme.

There is also a little haven before Garrichica, where men may lie with a few ships. For to sayle in there, you must have a Pilot. On the west side of the havens mouth lieth a rock under water, but the sea breaketh alwaies upon it, you may ankor within in the haven in five or six fathom, and must bring two ankors out a head to seawards, with a cable on the rocks, and an ankor out a stern, on the land, so that the ships can not wend to & againe, the ground is there foule, you must buye up your cables with buyes and cask for to keep them from the ground. This is a good haven in Summer, then it is commonly good weather, but in the winter it is not good to come in there with a ship, for the grown sea out of the n. w. commeth running in there sometimes so forcible and strong, that it not possible to hold a ship, although she had 10 ankors out. It hath hapened certain years past, that there was lost in the same haven a great many ships, and a great many houses of the same towne washed away with the great water.

Betwixt Garrichica and the east end off Teneriffe, are three

lade place more for to lade wine at, as Maramela Relecho, and Oratama.

At the s. w. end of Teneriffe lieth also another little haven or Bay where is much wines laden called Adeffa, there is also lying except it be with a south-west winde, which bloweth there open in.

From Teneriffe to the Iland la Palma, the course is w. n. w. 20 leagues. On the s. e. side the Palma lieth, a faire Bay, with a town and lade-place called S. Cruz. He that commeth from the northwards, and desireth to ankor in the road, let him run so far in the Bay untill he be to the southwards, or past the head, or the bridge, and ankor there in 25 or 30 fathom. In winter time men must not ankor so near the strand because of the s. e. or s. f. e. windes, for then they should lie to near the strand. Men lye there morred with two ankor for the sea winde, with a small ankor out a stern for to keep the ship right in the road, there lieth to the eastwards of the towne a high white rock with a crosse, there is the best road. A little to the northwards of the town, is a faire sandbay, there is good ankor in 20, 30, or 35 fathom according as men wil lie far off, the Road is called the Rammell road. When men lie in the road of Palma, they may see the Pieck of Teneriffe lie east south east from them. The Iland Palma is very high and ful of trees, whereby it is good to be know.

On the south west side of the Palma is another place, where men lade wines called Tassa Corda.

About 5 leagues west from the west end of Teneriffe, lieth the Iland Gomera, which hath on the N. E. side a good haven of 10 fathom deep, where is good lying almost for all windes, better then in any of the other Ilands, but there is nothing to lade: Men may also ankor without before the haven in twenty fathom, but they must shift roads there as at Garrichica.

The road of Adeffa in Teneriffe lieth right over against it, east off from it about 5 leagues.

The road of Palma lieth from this haven in Gomera north-west and by north 16 leagues.

The Iland Fero lieth from the Iland Palma south and by west, distant 13 leagues.

Of the tydes.

On the Ilandes of the Canaries maketh at the most places the natural tyde, to wit, a southwest and northeast moone the highest water.

Of the Courses of the Sunne.

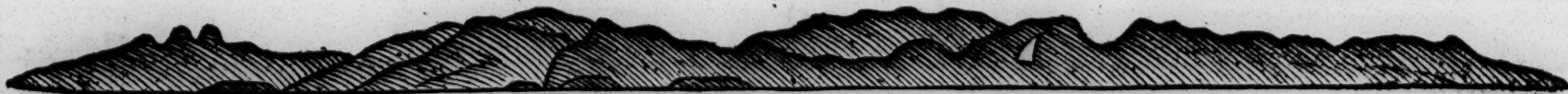
From the west point of Forteventura to the Iland of great Canaries east and west	19 or 20 leagues
From the north point of the Canaries to punte de Nago the north east point of Teneriffe w. n. west	21 leagues
From punte de Nago to Garrichica west southwest and southwest and by west	8 or 9 leagues
From Teneriffe to Ile de palma west north west	20 leagues
From the west end of Teneriffe to Gomera west	5 leagues
From the palma to ferro south and by west	13 leagues
From great Canaries to Salvages northnorthwest	40 leagues
From Garrichica to Salvages n. n. e.	29 or 30 leagues
From Teneriffe to the Ile de Madera north	72 leagues
From great Canaries to the east end of Madera n. and by w.	85 leagues
From the palma to Madera n. and by east	53 leagues
From Salvages to the Serters of Madera north	50 leagues
The outermost of the Serters lieth from Madera	4 leagues
From Madera to S. Michaels n. w.	136 leagues
From the west end of Forteventura to the cape de Bayader s. f. w.	20 leagues
From Lancerota to the cape S. Vincent n. n. e.	165 leagues
From great Canaries to Cales northeast	240 leagues
From great Canaries to the cape S. Vincent n. e. and by n.	210 leagues
From great Canaries to Roxent n. n. e. somewhat easterly	240 leagues
From great Canaries to C. de Finisterren, n. e. somewhat northerly	370 leagues
From Teneriffe to the Lizart, n. n. e. distant	467 leagues
From the palma to cape Vincent northeast	224 leagues
From Madera to cape de Geer eastsoutheast	133 leagues
From Madera to Safia east	130 leagues
From Cadera to Cales east northeast	200 leagues
From Cadera to Roxent northeast	173 leagues
From Cadera to the C. Finisterre n. e. and by n. somewhat northerly	245 leagues

Heights.

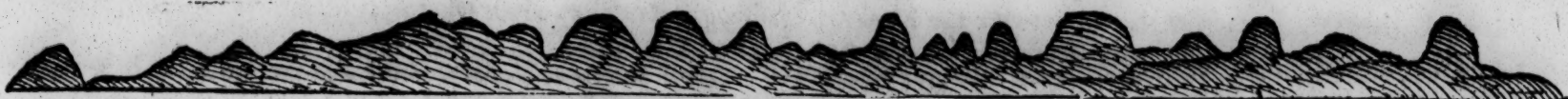
The Iland Lancerota lieth in	28 degrees 35 minutes
The north end of the great Canaries lieth in	28 degrees
The north end of the Teneriffe in	28 degr. 40 minutes
Ile de palma in	28 degrees 52 minutes
Salvages in	30 degrees
The southernmost part Madera in	32 degrees
But the Northernmost in	32 degrees 30 minutes
Porto Santo in	33 degrees

How these Lands doe shew themselves at Sea.

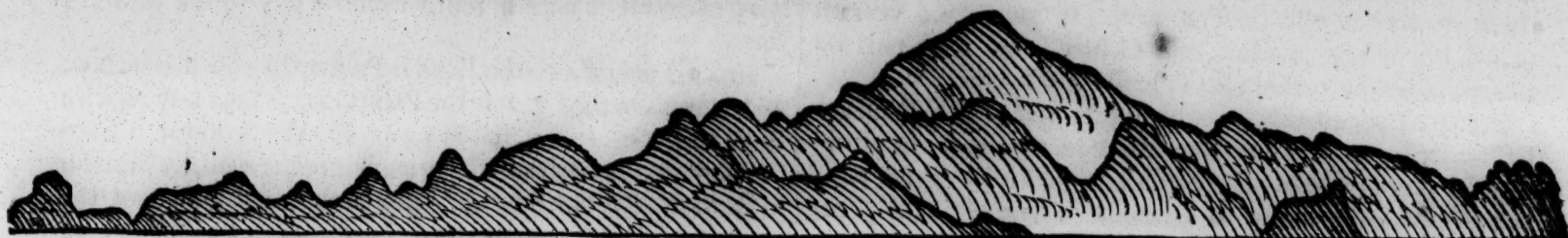
Hil with the Mizen.



Thus sheweth the south-coast of Forteventura, when the hill with the white Mizen is northwest and by north about a league from you.



Thus sheweth the northwest side of great Canaries.



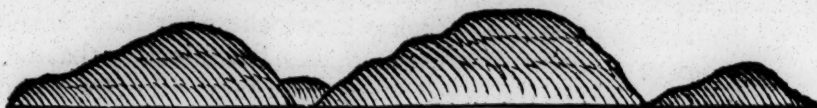
Thus sheweth Tenerife when the Pico is westsouthwest from you, and then are you open before the Roade of S. Cruz.



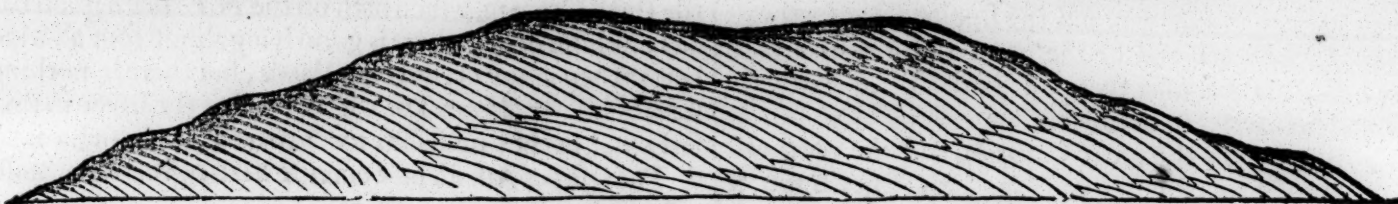
Thus sheweth Tenerife when the Pico is southeast from you, and then are you open before the Roade of Garrichica.



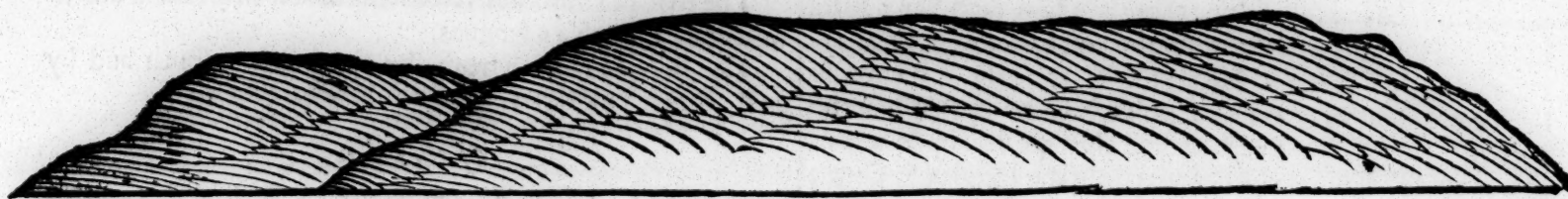
When the Palma is about east from you 16 or 17 leagues, then ariseth thus



When Porto Santo is south and by west from you about 9 leagues, then it sheweth it selfe thus.



Thus sheweth the Iland Palma being south and south and by east 9 or 10 leagues from you.



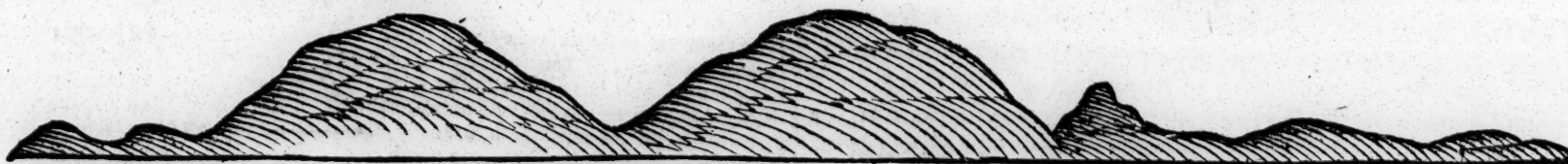
Thus sheweth the Iland Palma being southwest and by south 4 or 5 leagues from you.



When Salvages is east southeast 5 leagues from you it ariseth thus.



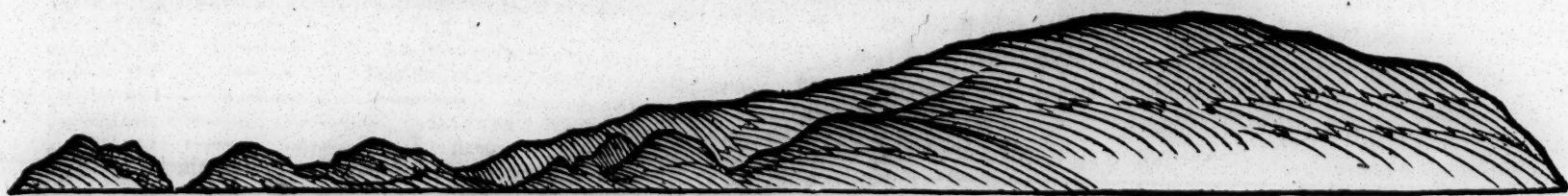
When Salvages is eastsoutheast 5 leagues from you it sheweth it selfe thus.



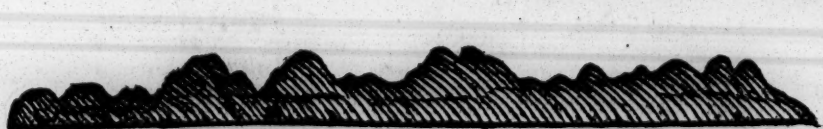
When Porto Santo is about south, 5 or 6 leagues from you, then it sheweth it selfe thus.



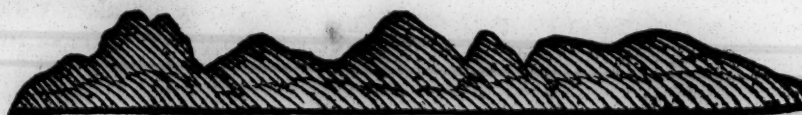
Thus sheweth the Iland Madera, when you come from the northwards, and that the middest of the Iland is 10 or 12 leagues from you, the southeast end is very ragged when you are neere by it, the northwest end is a steep point going sloping downe.



Thus sheweth the Iland Madera being southwest from you.



When Madera is westsouthwest from you 13 leagues, is ariseth thus.



When Madera is south from you 16 leagues, it sheweth it selfe thus.

F I N I S.

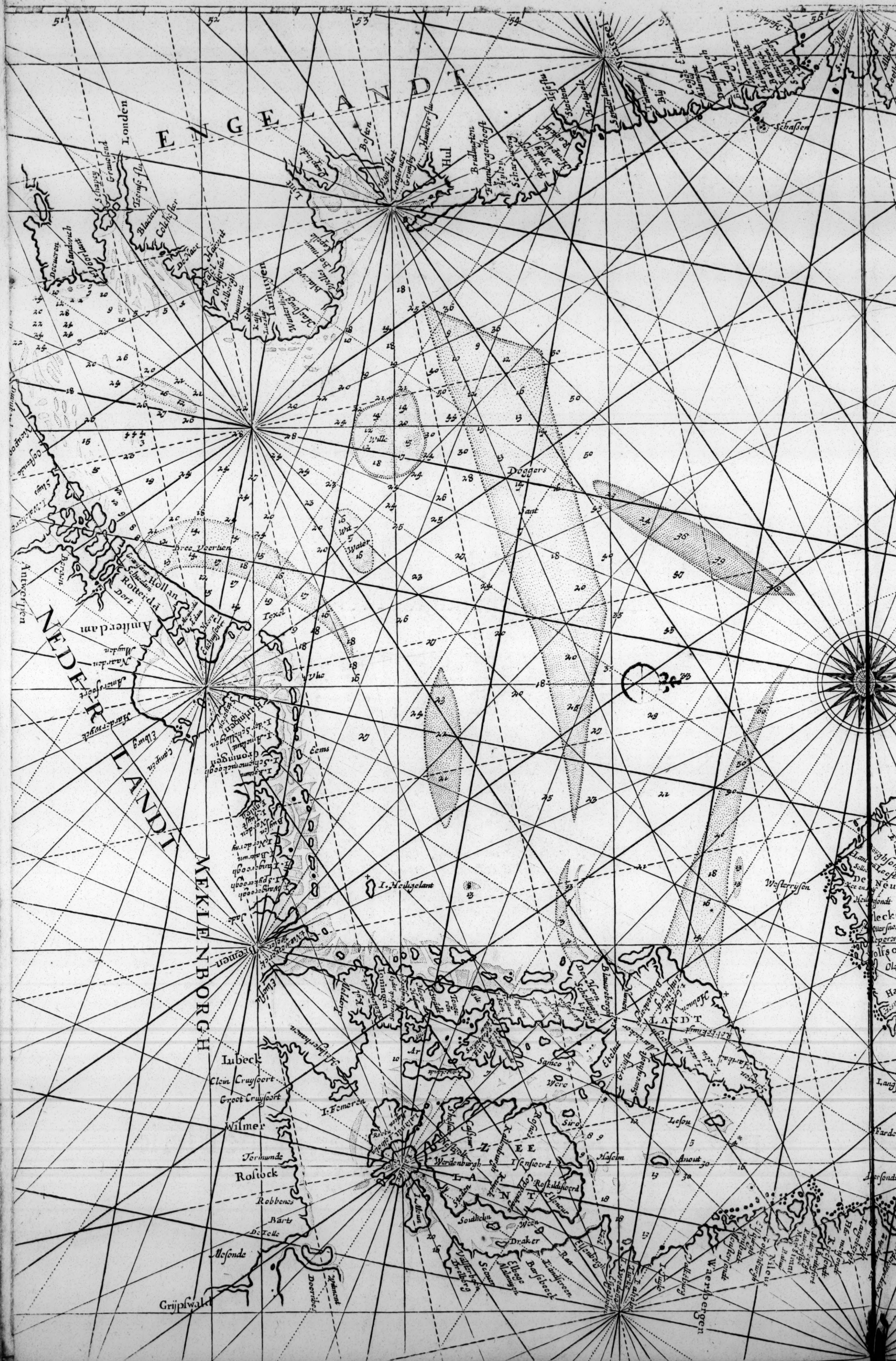
The first part
THE FIRST BOOK
OF THE
FIERIE - SEA - COLVMNE,
WHEREIN
The Description of the whole
NORTH-SEA.

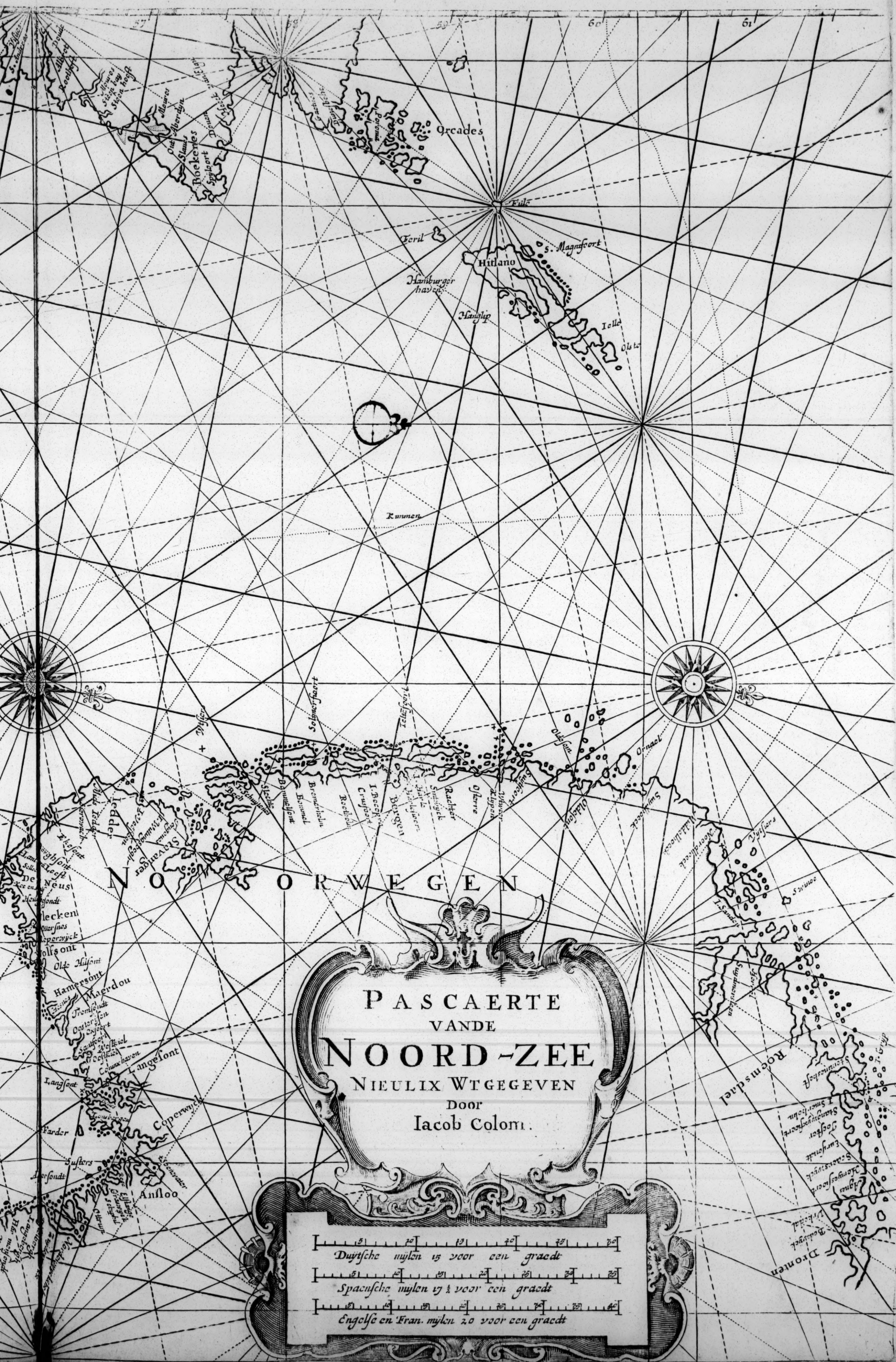
VVith privilege of the High and Mighty Lords,
the States Generall, for twelve yeares.

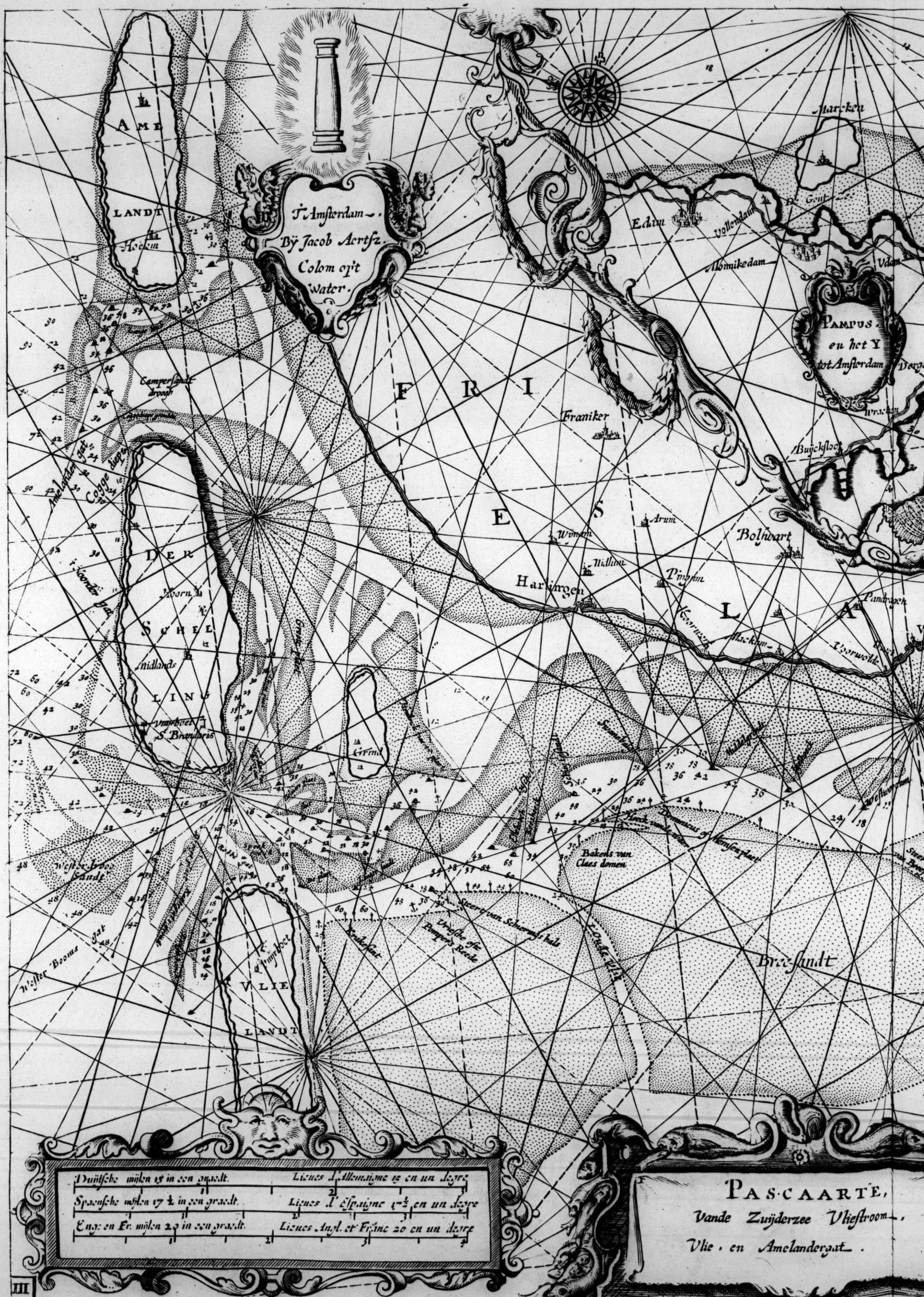


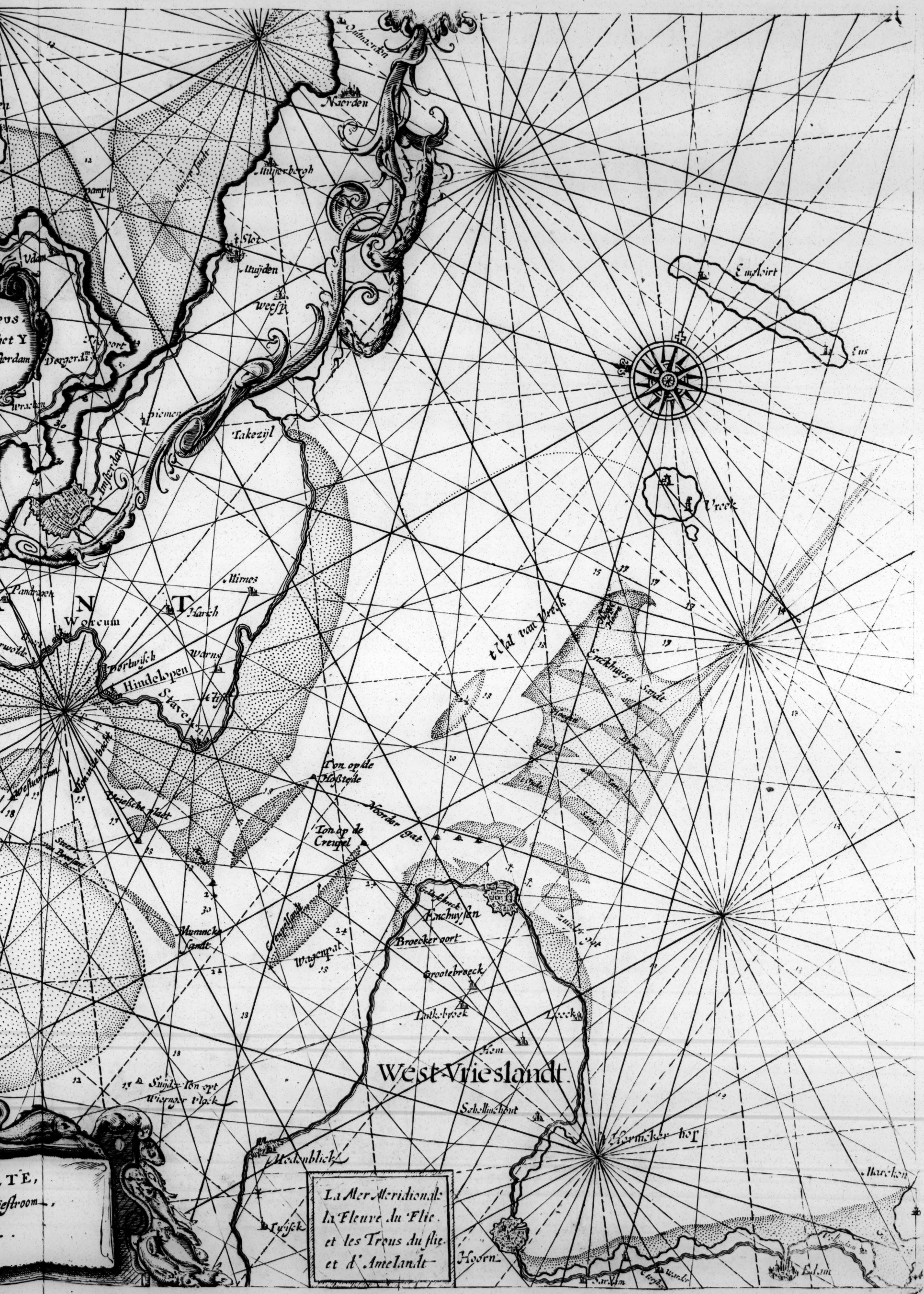
Printed at Amsterdam,

By Iacob Columne, on the water, in the Fierie
Columne,









La Mer Meridionale
la Fleuve du Flie
et les Trens du flie
et d'Amelandt

E

Mark
the b
upon
Hof-
& Cri

The K

Sou
kryl.

March
the K

Free
plate.

Mon
sand.

The Second part of the Firie Columnne,

THE FIRST BOOKE,

Of the

EASTHERN and NORTHERN NAVIGATION.

Containg

*The discription of the North-Zea, the coast of Holland, Friesland, Halsten, Iutland, Meklen-
bergh, and Denemarck to Ualsterboen, in the Island of Rugen, and with all the coast off Norway
to Dronen, as also the eastside of England and Schotland.*

The first demonstration,

Where in are described the southsea, the Vliestreame, the Vlie, and the channell off Ameland.

How men shall sayle from Amsterdam to Urck (about Enchusenland) and from Enchusen to the Cripple and Creyl is described in the first demonstration of the first booke concerning the Western Navagation.

Markes of the buyes upon the Hof-stede & Cripple
The thwart markes of the buyes, both upon the Cripple and Hofstede, are Crootebroeck and Hem two sharp Steeples right one in the other, and Warnis, a little sharp steeples in Friesland to the south side of the Cliffe of Staverne, then you have the length of these buyes, which lye each of them in three fathom, the one on the east shoare, and the other on the west shoare upon the tayle of the Cripple. There is in the right farewaye, two foot lesse then five fathom, and soft ground. When the steeples of Medenblick commeth to the N. wards of the house of Medenblick, so farre as the house is broade, then you are cleare of Cripple sand, and past it; goe then on northwest, and north west and by north to the buye upon the Creyl, according as the winde and tyde shall be, the right farewaye there, is deep five fathom scarce. Thwart of the Creyl, in sailing out, or about the Creyl, in sailing in, that is a little within the Creyl on the north shoar, lieth alongst the reach towards the buye upon the Hofstede, a hard sand or plate, called the south Creyl, upon which there is no more then twelve foot water, at low water, betwixt that back and the north shoare it is three fathom deepe, and soft ground, and to the southwards, or the westwards of it, foure fathom and an halfe. When Mirnes, a little flat steeples in Friesland, cometh over along countrie house to the southwards of the cliffe of Staverne, then you come right thwart of that foresaid plate.

Markes of the Creyl.
The markes of the buye upon the Creyl, are that sharpe steeples of Twisch over the Cornemill to the westward of Medenblick, and that little flat steeples of Mirnes to the southside or east side of the cliffe. The right farewaye there is four fathom and an half, and five fathom deep, soft ground, the buye lieth in four fathom, if need buye lieth in foure fathom, if need require, men may runne wel a cables length about to the eastwards of it. From the buye upon the Creyl to the buye upon the Freefe plate, the course is north and by east: When the steeples of Twisch commeth a little to the N. wards of Medenblick, then keepe them so standing, so long as you can see it, and then you shall not saile within any shoulde betwixt that plate and the Creyl. Betwixt the buye upon the Creyl, and the Freefe plate, on the west shoare, alongst the Reach, lieth a hard sand, called Monnick sand, which men may be foul of, if they runne somewhat to farre to the westwards.

Freefe plate.
When you are come about the Creyl, you may goe on north and by east (with a shippe that draweth but little water) over the tayle of Broad-sand, right to the buye upon the sand, called West worckum, but with shippes of great draughts, you must keep the right farewaye. For to finde the deepest water upon the flat: bring Pandragen, a little flat steeples (standing to the westwards of Worckum) to the westwards of a little village, which standeth also to the westwards of Worckum, and sayle so right with it, that is a good longstmarke of the buye upon the Freefe plate, and so you shall runne right with the buy, when as that Warnes and the Mirnes come one in the other, to the northwards of Staveren, then you have the length of the buy, which lieth on the west side of the Plate, you must runne alongst to the westwards of it, there is the deepest water: when you come from the northwards, you might sayle within the Freefe plate on the east shoare.

Being past the foresaid buye upon the plate, goe on north-

northeast, untill that Pandragen come betwixt the little village and Voorwolde. If that you have then the cliffe through Staveren, then you have the deepest water upon the shouldest of the flatte, then men runne commonly a little more northerly unto the buye in the Bight, and alongst to the westwards of it, which lieth right in the farewaye in sixteen foot, but alongst to the eastwards of the buye is the deepest water, the farther into the Bight towards Friesland the deeper. The marke of this buye, is the little flatte steeples of Mirnes on to the southwards of Molqueren. Bring that foresaid little flat steeples in Molqueren, and keepe it so standing, and then you come in the farewaye of the buye of West-worckum, that is a very good marke, when the buyes are taken away.

The old thwart markes of the buye in the bight, are Mirnes, Molqueren, Hemelum, and a little long village, when they stand in four parts. Betwixt the buyes upon the Freefe plate, and in the Bight is the shouldest of the flatte. When the buye in the Bight is on your broad side, then go on north and by west, somewhat more westerley; unto the buye of West-worckum, which lieth on the east shoare in sixteen foot at low water, upon these markes: a little sharpe steeples, far within the land called Harich, commeth over a little village, to the northwards of Hinlopen, called Dertwisch, the right deep thwart of it is three fathom. The old markes are two villages next to Mackum, upon the water side, standing N. E. off from it, when these stand a little asunder, one from the other, you see yet two little steeples somewhat to the northwards of Bolswaert, almost one to the other, neare about as the other upon the water side stand a sunder; the one is called Idsegahuyfen. The thwart markes are a high house on the east end of Coudom, that commeth with in a capstone barres lengt to the south end of Hinlopen. From thence to the buye upon Yghelhoeck, the course is north, the markes there of are, a little sharpe steeples with the first long village to the northwards of Worckum, called Geest, when that little steeples commeth in the innermost swampe of that long village then you have the buye, that is a good thwart: the longst marks are, the sharpe steeples of Pingom over the flat steeples of Coorenwaert upon the water-side, and Pandragen to a little house to the northwards of the village with the swamp, or when the mil of Staveren standeth betwixt the towne and the Blockhuys of Staveren, these are all good longst markes of the buye upon Yghelhoeck.

From Yghelhoeck to the middle ground the course is north, the right deepe in the Middle ground is 7 fathom in the fareway betwixt West-Worckum and Yghelhoeck the right deep is four fathom, soft ground, the east shore is flat and the west shore steep. The buye of the Middleground lieth upon these markes: the two sharpe steeples Arum and Pingom one in the other about northeast from you: or Bolswert right to the northward of a Countrie house, to the northwards of Mackum, these are good thwart markes of the Middle ground. The longst marks are: Kinswart, (that is the runner) commeth behind the Church of Surich, then you are right in the farewaye. The Church of Surigh standeth upon the water side, upon a pointe that lieth out about to the northeast and by north from the buye, or when the flat steeples of Wynaem (to the northwards of Harlinge) commeth betwixt Midlum & the east end of Harlingen, then you are right in the Middle-ground, on which side that Wynaem standeth nearest unto, the west shore is steep, the east shore indifferent flat, you may run

over it in three fathom, and come againe in five fathom towards Frieland. From the Middle-ground outwards to the Flye, you can sail within no tailes of sand on the west shore.

Swane-
balgh.

Being past the buye in the Middle-ground, then goe on northnorthwest unto the buye upon Swanebalgh, which lieth in three fathom on the east shore, the thwart marcks there of are Bolswaert a little short house to the southwards of Cornwaert. When you runne over betwixt the buyes of the Middle-ground and Swanebalgh on the east shore more easterly then in three fathom, that you come againe in four or five fathom, you might (in sailing out) sail behind the shoulds of Swane-balgh, or when you are bound in behinde the showlds of the Middle-ground, the west shoare thwart of this, you may found in four fathom, or three and a half, over against the buye upon Swane-balgh, on the west shore is good ground for to anchor in.

Schuyte-
sand.

From the Buy upon Swanebalgh to the Buy upon Schuytesand the course is N.W. somewhat northerly: the thwart marckes there of are Wynaem over the heighest part of Harlingen: the longst marckes are, Bolswaert the northwards of the Sluys, which lieth to the northwards of Woens, this buye lyeth in 6 fathom on the east shoare, upon a taile or point, which you might saile within when you sayle out, the right deep thwart of it is 7 and 8 fathom, the west shore is indifferent flat, which you may found indifferent flat, which you may founde in 4 fathom, the east shore is steepe, but a little without the buye, is flat all alongst to Keeshoeck, and you may found it all alongst unto the Sloor. In sailing up, you might sayl within the west shore over against Schuytsand, or a little to the southwards of it in 3 fathom, or 3 and a half into Deadbalgh, behind a taile of sand, called the point of the Waert, but keeping in 4 fathom from that shoare, you can not take hurt of it. In sailing up with a forfloud, keep the east shore, or els you should be lightly carried there with into the foresayd balgh, behind the Waert, before you should be aware of it. Upon the poynt of that waert standeth a drift beacon, and 2 to the northwards or the westwards of it, which men doe call the beacous of Claesfoomen, and to the southwards of it standeth a beacon upon Dominicus plate, or, (as the Pilots do name it) Meynsen plate. The marcks for to sail alongst this long reach are: Mackum with a mill upon the water side, and a village with a little flat steeple to the southwards of Mackum, called Idsegahuyfen when Pandragen commeth betwixt Mackum and that village then you shall go cleare of that foresaid taile or Deadbalg: If Pandragen come nearest to Idsegahuyfen, then you are to near the foresaid taile or plate, or if pandragen come nearest to Mackum, then you are to neare the east shore.

Point of
Waert.

From Schuytsand to the buye upon Keeshoeck, the course is westnorthwest, or northwest and by west according as the wind and tydes shall be. In that long reach goe litle more then half tides alongst the deep, the afterflout and fore-eb fall thwart over there to the westwards, and the after-eb and forefloud right contrarie to the eastwards. The marks of the buy upon Keeshoeck, are Franiker steeple betwixt the mille and the towne of Harlingen, or to the mastes of the Shippes which lye in the haven.

Keeshoeck.

This buye lieth on the east shore, the right farewaye thwart of it is eight, nine and ten fathom deep.

Betwixt Keeshoeck and Schuytesand, or betwixt the beacons of Klaesfoomen and the poynt of the water lyeth a little narrowe plate alongst the rach, allmost in the midst of the farewaie nearest to the west shoare, whereupon it is not deeper then four fathom, or three fathom and an halfe, when men turne to windwards the yare over it with two or three casts of lead.

Old Flye.

Westwards from the buye upon Keeshoeck lieth the Old Flye, it lyeth in first southsouthwest, and then forth to the buye upon the Nesse, in the Tessel stream. The after floud with the fore-ebb fall in very strong into this channell. In sailing upwards you might sayl within it in four fathom. The marks of it are, the steeple of Franiker right to the southwards of the steeple of Harlingen. From thence outwards off unto Schieringshals the west shoare is very steep, in eight fathom you shall be close by the shoare. The fareway betwixt these buyes, and thwart of the buye upon the Elbowe is tenne and eleven fathom deep.

Wolfs-
hoeck.

Schor tun
or the buy
upon the
Elbow.

From Keeshoeck to Wolfshoeck the course is first northwest and northwest and by north unto the buye betwixt them both, by some called the Schor tun and by the Pilots the buye upon the Ellebowe: and from thence to the buye upon Wolfshoeck, north, or somewhat more easterly, which lyeth in four fathom on the east shore.

From the buye upon Wolfshoeck unto the buye unto

Schieringshals the course is northnorthwest, and northwest and by north according as the winde shall be. To the northwards or to the eastwards of the buye upon Wolfshoeck goeth up a broad bight southeast farre into grounds, so deep as the right farewaye, called the Inschot, comming in you might sayle within in seven fathom, the forefloud falleth from Schieringshals very strong into it, and the fore-ebbe to the contrarie, very strong out of it upon the taile of Schieringshals, whereby many ships are miscarried.

Schie-
ringshals

The ta-
leuot.

Schieringshals is a tail of sand, which shooteth off from the west shore, upon it lieth a white buye in three or four fathome, comming in from without, men might sayle within it in sixe fathom, the right deep betwixt Wolfshoeck and Schieringshals in nine fathom.

From Schieringshals to Longsand, the course is northwest and northwest and by north, betwixt them both on the west shoare it is shallow water, and the best roade of al the Flye streame, there goet also little tyde. The right deepe is eight, nine and ten fathom, Longsand men might sayl within it on the east shoare, in sailing up, but if they keep themselves in seven or eight fathom, they shall not come to neare neither of Longsand nor Schieringshals. When the eastermost house upon Grindt commeth a little to the northwards of the westermost, then you have the length of the buye upon Longsand. From Longsand to the Sloor the course is forth northnorthwest, the right deepe is tenne fathom, or men run alongst by the beacons upon Crakesand untill they come into the Sloor.

Monck-
sloor.

The Iland Flieland is three leagues long, and a land very good to be known: upon the east end lie high white sand hills, and to the westwards it is a land full of short low hommocks or nobbes. Upon the west end standeth a Church with a mill to the eastwards of it. From the west end shooteth off a riffe a good wayes into sea. To the westwards of this riffe, betwixt Flieland and the Eyerland goeth in a deep, called the Westergatte, or Westfel deepe, which is not for great ships, but onely for Fisher boates, there is not above eight or ten foot water. Upon the east end standeth a mill with a cape, the which are markes for to avoid the ground, which lye before the Flye.

The east end of Flieland, and the west end of Tessel lye eight leagues asunder.

To eastwards of the Flyeland lyeth the Schellingh, which is about three leagues long. Upon it stand four churches, with one chappell, the westermost is a high flat steeple called Brandaris. About the midst of the Iland stand two steeples, the westermost is flatte, called Zeerip: the eastermost is sharp, and is called Midlands. To the eastward stands a high sharp steeple called the Horn, and chappell called Saint Iohus. Upon the east end lye high white sandhills, and upon the west end lieth but one, called the Lit, betwixt midlans and the Lit it is low Nubby land. Upon the west end standeth a cape with a Fire-beakon, where on there is fired by night.

Stortemelck

For to sayle into Stortemelck (that is the Land deepe of Flieland) you must bring the Cape upon the east end of Flyland, and the mill one in the other, which shall stand then from you southeast and by east, or a little more easterly, sayl right in with them, and you shall fall right with the outermost buye, which lieth in five fathom upon the outermost point of the long banck, which banck is on the northside indifferent flat, so that when you come from the north, you may run alongst by it upon your lead in five or sixe fathom, and so also find the foresayd outermost buye. You may also (for need) run alongst somewhat to the eastwards of the outermost buye, over the end of the long banck in three fathom; or 16 foot towards the shoare, but not to the eastwards of the second buye, but a good wayes alongst to the westwards of it, which lieth even the southwards of a poynt of another narrow taile of sand, upon which thwart of the buye is but eleven foote water, betwixt that taile and the long banck runneth a creek to the eastwards into the grounds, of five fathom depth. It happeneth sometimes that the shippes that come over the end of the long banck, and finding again deeper water, thinck that they are in the right deep of Stortemelck, and luffe up into it, but they run into the foresayd shoare or creecke, in betwixt the two tayls of sands, not without a great danger with a westerly winde, where they must go out back againe. Comming from the westwards alongst by Flieland in foure or five fathom, you shall not also sayle to run in sight of the foresaid outermost buye. He that falleth about Stortemelck by night, let

let him bring the fire-beakon southeast and by east from him, and run in so right it untill hee come by the shoare, and he shall run alongst to the westwards of the outermost buye. In Stortemelck lye 7 black buyes, and one white buye, in sayling in you must leave al the black buyes on the larboardside, & run alongst to the southwards of them: and the white buyes on the starboard side, like as al other white buyes as well in the Boomsgat, the Jetting, as upon the Flye-streame. The second buye called the outermost Droge dry, lieth in 11 foot upon the shouldest of the channell, to the southwards of it also is no more ten eleven foot water, but a little within, it is againe sixteen foot deep. The third is called the innermost Droghedry, which lieth in sixteen foot, the right deep betwixt them both is 3 fathom. The fourth is called Heyck hooch, betwixt this it is in the fareway five fathom deep over against the fourth lieth the white buye at the strand, thwart of it runneth of a little tail from the shore, which (in sayling out) you might saile within it. Upon this white buye, or unto the fourth buye from without, it lieth in eastnortheast, from the fourth to the fifth about east, and then more and more southerly. The first buye, is called the outermost poynt buye, the sixth the middlemost point buye, and the seventh or last the innermost point buye.

Betwixt the outermost and the middlemost point buye, nearest to the outermost, runneth off a taile of sand from the shore, which men might saile within when they come in, which groweth out sometimes as a farre as the buye, and then the Deepe breaketh through again by the shoare, and scoureth away the taile altogether to the north side. From the innermost buye you must run in to all alongst by the strand of Flye-land, or on southwards the buye upon the Plate.

Boomsgat.

For to sail in at the Boomkens-gat comming out of the sea, or from the westwards: bring the Cape upon the Schelling and the steeple of Brandaris one in the other, which shall then stand from you, fouth and south by east, run then right in with them, and you shall find the outermost buye without, the channell in these in 5 and 5 $\frac{1}{2}$ fathom a little without, and to the eastwards of the outermost poynt of the steepe ground, which are without upon the north side so steepe, that you shall be in twelve fathom very close to them, whereupon remaineth no more then five foot water. Close to the westwards of the foresaid Cape standeth a Fire-beacon, whereupon is fired every night.

Comming by night out of the east, you must have a care of the turning of the water about the wall, and runne along thereby upon 3 fathom, untill the fire is thwart from you, and so along upon 3 fathom unto Feyhooch, then is the fire about east and east somewhat northerly from you, where you get deeper water. You may runne upon 4 fathom without round about the shore grounds. The easter Beans-gatte is not well to sayle in for one that is not acquainted there, because there are so many Irre-grounds as by Oesel. The fore-floud falled there east-northeast thwart over this hole, almost untill halfe floud, before it goet right inward; unto the contrary, the fore-ebbe falleth also westsouthwest thwart over the hole, almost untill halfe ebbe, before the same falleth right out, therefore is it best with an northeast or easterly wind and fore-ebbe, to go on a good way by east the Cape and tower of the east wall, and runne along thereby upon 3 fathom, (being wholly cleane and flat) untill you are within the Cape and tower. The second Buy lieth with it the utmost poynt of the shore-grounds, distand from the first about southwest and by west, the shore grounds are on the end so steep, that is close thereby 18 foot deep, the east-wall is in going up very flat and begins to be dry from 18 upon 16, 14, and 12 foote. By east the second buye, is the farewater 3 fathom deep, there by west it is 5 fathom, but not wide, therefore you may not runne there farre along by west, because with a fore-ebbe you should come easily against the shore-grounds, which are on in-side very steep. You may runne on the east wall upon the lead, so close by the same as you please, though with a storme the Sea doth burne and breake thereupon untill the 2 Buye. The second, third, fourth, and fifth buyes doe lye all upon a self-same distance from each other, to wit, southwest and northeast, the third on the east-wall, though you may runne thereby beyond east, the east-wall there besides is very flat, and the fare-water by west the Buye seven fathom deep. The fifth (called the buye upon Fey-hooke) lyeth also on the east-wall, (though somewhat nearer then the third) upon 5 fathom, men may sayle there along by east but not farre the farewater there by west is 7, 8, and 9 fathom deep. You may saile in upon the lead (till you are past this buy) along by the east-wall, also by night or darke weather you need not to be afraid of any danger, for there within is it wide and broad. From Bey-hooke you goe

unto Robbe-gat. On the north side of the Robbegat, upon the top of the drye Plate, standeth a beacon in the midst of the Robbe-gat, next unto the drye Plate, lieth a small dry place, upon which before in the comming in there lieth a buye, betwixt the same buye or the small drye place and the foresayd Beacon is the deepest water, but you must runne in close by the Beacon, for not to be mislead with the streame, which doth fall there thwart over the drye Plate, beneath and betwixt the small drye place, and the Rosin-plate, is it wider, and the Robbegat stretcheth southwest and southwest and by west in. Being through the Robbegat, there runneth the strand of Vlieland, where you may passe along close by.

Wester beams-gat.

For to saile into Wester-beams-gat, or hole comming out of the west, bring the Cape & steeple of Brandaris over against another, which is then east and east & by south from you, runne thereupon, and you shall finde the ut most buye; there is 6 fathom water, keepe the Cape and Steeple so standing untill you come by the second buye, bring then the Steeple a great handspikes length by south the Cape, and saile thereupon, then you shall passe along betwixt a black and white buye, there is upon the dryest place 17 foot with low water, from thence you come unto 6 and 7 fathom, and so forth in the right Beams-gat, on the north wall it is deepest water being wide and broad, so that a man well could loofe up into this hole, the Streame runneth there right in, although it be still weather.

For to saile into the Jetting, comming through the Robbe-gat, beyond the Rosin-Plate, you may runne unto the Buye upon Langeland, and so forth along betwixt the white and black buyes, leaving (in sailing up) the black on the larboard, and the white on the starboard, untill you come against the Beacons upon the Nakens, then you may plainly see from the one buye unto the other, saile then so forth along, by the Beacons upon the Nakens, east south east on, untill Brandaris come close by Grind, (but not thereon) hold it then so standing, and runne southward on, you shall sayle then just upon the taile of Hendrick't Jaerts Plate, which you may underfaile on the east-side; Leave the same on larboard, and runne there by west along southsoutheast unto the last buye, which lieth upon the southpoint of the foresaid Hendrick't Jaerts Plate. Over against the Beacons upon the Nakens, on the south-wall lie two white buye, the eastermost upon a taile, which in sailing off you may underfaile. There by fouth, betwixt the two last black buyes by the west wall, is the Road where the Shippes (going unto Harlingen) doe set for to unlade them selves.

N O T A.

All dephts, as heere before is described, as well of Stortemelcke as of Boomkens gat, is said to be of the lowest water, with halfe floud it is 3 foot deeper, it fleweth upon the foresaid places with halfe floud it is 3 foot deeper, it floweth upon the foresaid places with a common tyde sit and an halfe or 6 foote up and downe. The number of the dephts in the Mappe, of the flie and Ameland-gat, are to be under stood of so many foote as the number is, as by example: by the utmost bay of Boomkens-gat stands 66 which is 66 foote, or eleven fathom that is 6 foot for one fathom.

Ameland-gat.

Two leagues to the eastwards of Schelling lieth Ameland, lying E. N. E. and W. S. W. foure great leagues. Upon the W. end of Ameland standeth a Cape and a great thick flat steeple, called the Hoelme, the rooffe of this Church is broken off, but the after fronte with the rooffe standeth above the side walls to the e. wards of the church of Hoelm standet a mil, with a house to the westwards of the mill, also a broad flat towre. About the place whe Midlandchurch was wont to stand, lye three or foure white sandhilles, which are low, flat, and long, towards the east end it is nobbie land, with white amongst it. From the west end of Ameland runneth off a riff, almost three leagues into sea, called Born-rif, which is upon the outer side verie steep: come no nearer it then in 12 fathom, comming from the eastwards you cannot saile within it, but in sayling alongst by it in seven fathom, you shall not run a boweles cast along without it.

For to saile into Ameland-gat, comming out of the sea, bring the cape upon the east end of the Schelling, right over the steeple of Horne, which shall then stand from you S. S. W. or a little more westerly, saile in right with them, untill that the cape upon Ameland, and the steeple of Hoelme are one over the other, then leave the first markes, and sayle in upon the

Bornriffe.

Kogdeep
grounds.

the second, and you shall finde the outermost buye, which lye somewhat within the outermost point of Bornriff. Comming from the westwards, run along by the strand of the Schelling in five, or fixe fathom and an halfe at low water, and you shall not fail to sayle right upon the outermost buye, and then the Cape and steeple upon Ameland shall also come one over the other, and stand from you east, or a little more southerly. Comming alongst by the Schelling in four fathome, you shall not sayle within the Koggedeepe ground, over against then lieth the first buye on the south side of Bornriff, run alongst to the southwards of it, keeping the cape and steeple one over the other, untill you be past the second buye, which lieth thwart of the west end of Kamperland, the fareway betwixt these two buyes is five and fixe fathome deep.

Gerrits-
honden.

Being past the second buye, bring the steeple somewhat to the northwards of the Cape, and goe on eastnortheast towards the third buye upon Gerrithonden, for to avoyde the plate which lieth off from the southside, towards Bornriff, on it lye two white buyes, the first over against the a foresayd third black buye, the other over against the fourth black buye, lying from the third about southeast, leave the black buyes all on the larboard side, and the white on the starboard side, and run through so betwixt them both, the plate is, on the north side indifferent flat, so that you may run to it upon the lead, reckon wel your tydes, especially be carefull of a fore-ebbe, which falleth very strong over that channell northnorthwest into sea over Bornriffe. Betwixt the second and third buye in the fareway it is eight and nine fathom. Betwixt the third and the foresayd plate seven fathom. Being past the fourth buye, both sides are very steepe, and the fareway 8, 9, 10, and 12 fathom deepe, goe then in southsoutheast, untill that the steeple of Holm com over the south poynt of Ameland where the boats lye, and then you come in the bight, where it is on the southside flat, and good anckoring in five or six fathom, the north shoare is very steepe.

For to faile further into Horsen, go away from the bight eastnortheast alongst by the south side in five or six fathom, so long untill Heynooms chamber (being a red tyled house) come a handspikes length to the northwards, or to the eastwards of Hoelm-church, anckor there in 5 or 6 fathom, you shall lye

there in good ground, and sheltred for al winds, also there goeth little tyde, in this fareway it is 12 fathom deep, the northshore is there very steepe. These foresaid depth (like as also those of the Flye) are sayd of low water.

Of the tydes.

At Amsterdam a northeast and southwest moone maketh the highest water. At Horne, Enckhuysen, and at Urck, a north and south moone. Betwixt Cripple-sand, and the Creyl, a north and by west and south and by east moone.

Upon the Frieze and Wieringer flat, a northwest and southeast moone. In the Flye and Ameland-gata southeast and northwest moon maketh high water. Before the flye the flood falleth to the wards thwart over the grounds almost untill halfe flood, before it setteth in the Boomkens-gat. Likewise the Ebbe to the contrary falleth to the westwards thwart over the grounds, almost untill halfe eb, before it setteth right out at the channell. The afterflood turneth about with the fore ebbe and fall alongst Flyeland out a Stortemelck, but the foreflood runneth right into Stortemelck.

Of the depth about these places, and in what depths men may see the lands.

The Islands Flyeland, the Schelling, and Tessel, men may see in 15 and 16 fathom. Thwart of the chelling the ground is white sand.

The steep grounds or Peterland and Born-riffe, are very steepe on the of side, close by them it is 12 or 13 fathom deepe.

Ameland men may see in twelfe fathom, the depth of 13 and 14 fathom runneth far of to seawards, so that men cannot see it in 15 fathom.

Courses and distances.

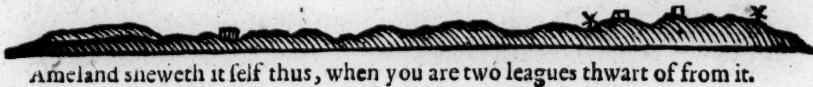
Peter-sand, or the steepe grounds and Born-riffe, lye northeast and by east, and southwest and by west	4 leagues a funder.
From the Flye to the northeast end of the broad-fourteens, the course is west-northwest	8 leagues
From the Flye to Tinmouth or westcastle, westnorthwest	90 leagues
From the Flye to Hitland, the course is northwest, and by north, somewhat northerly	152 leagues
From the Flye to Faire hill, northwest and by north about	144 leagues
From the Flye to Sneytenes, the course is north and by west, somewhat northerly	106 leagues
From the Flye to the Naes, north and by east about	85 leagues
From the Flye unto the Riffe in 16 fathom north and by east 63 or 64 leagues	
From Flye to Boevenbergen, the course is northnortheast or a little more easterly about	69 leagues
From the Flye to Rinkopper, or Numer-deep, northnortheast, or a little more easterly about	58 leagues
From the Flye to the Island Silt, on the coast of Iutland, the course is northeast	46 leagues
From born-riffe to the Naes, the course is n. a little more easterly	82 leagues
From born-riffe to Holy land northeast and by east	33 leagues
From born-riffe to Wranger-oogh, eastnortheast	29 leagues
From born-riffe to the Wester-Eems	14 leagues

How these Lands doe shew themselves at Sea.

Thus sheweth Flyeland when you are two leagues thwart of from it.



Thus sheweth the Schelling when you sail alongst by it about two leagues from the land.



Ameland sheweth it self thus, when you are two leagues thwart of from it.

The second demonstration,

Wherein the Scholbalgh, Lauwers, both the Eemses, the Weser, the El-ve, and the Eyder, and other channels of the sea betweene them.

Schier-
monck-
oogh.

Schiermonck-oogh lieth from the eastend of Ameland east somewhat northerly 2 leagues, it is a little low plaine land, about 2 leagues long, there standeth no speciall thing upon it to be knowne, but upon the West end two capes, with a withe sandhill, otherwise it is all whit lowe blakish sandhills, or hommocks, (but higher then upon the east end) and mingled with white: the eastend is a long flat stand, with little low rough sandhills. When you bring the two capes upon the west end one in the other, and runne so in, you shall finde the outermost buye, which lyeth without the channell, at sea, in 7 fathom, or thereabouts. Sometimes there lye two and sometimes thre buyes in the channell, which you must leave on the starboard-side, and runne alongst to the eastwards of them, being come within the channell, you shall find also beacons on the W. shore, which you must follow all along, untill you come to Ostmerhorn, where you may anckor. The lying in, and depths of that channell doe alter and shift oftentimes, and sometimes much within a shor time so that there is no certainty to bewrittē of it, wherunto mē migth trust.

Rottum.

Four leagues to the eastward of Schiermonckoogh, lieth the Island Rottum, and betwixt them the little land the Bosch. A few yeares past through, setting of spyrie graspe or heath, there was grown two or three handsome sandhills, but are now againe altogether blowne away, & altered into a plaine strande, which the sea at high floods dorth altogether runne over.

Betwixt these Islands the Bosch and Schiermonckoogh was wonte a channell to go in of indifferent depth, called the Lauwers, which is now most cast, to by the foresaid strand of the

Bosch, which is grown in al alongst unto the oogh, so that there is no more remaining, them a narrow and shold creek.

To the eastwards of the Bosch goeth in the Schille, also an altering and uncertain channell, which is sometimes deepe, and sometimes againe shold, and the channell shifteth too and againe, so that there is no certainte to bewritten of it, wherunto men might trust.

The Oldor Wester Eemses.

When you set the Capes upon Rottum over against another, the same shall stand the southeast somewhat southerly coming out of the sea, sayl ther frely upon, you shall find then the utmost buye, and you may see then the Steeple of Backum E. somewhat southerly from you, and the west-end of Rottum southeast, and by south, and lieth upon the taile of the many-Bags-Plate, being a white buy, with a little wind, upon the top, lying upon six fathom with low water, being marked in the mappe with the letter A from the first buye unto the second, is the course southeast and by south, marked with the letter B, that is the first black buye, upon 7 fathom on the south wal, leave this buy, in sayling in, on starboard, and the white buye on the larboard then you have the steeple of Borckum from this foresaid black buye, east, and the Capes upon Rottum, southeast somewhat easterly from you. From the first black buye unto the second, third and furth buye, with the letter C. D. E. is the course east and by south. Comming out of the west next unto the Lauwers or Boffand, hold it off from the shore upon five fathom, till you are past thereby, saile then freely east on, and

Many
Bags-plate

Namen sommigher
plaetsen op de Elve
geteeckent met
letteren.

- a De Schorton
- b Coolton
- c Witte ton op de nieu:
we gronden
- d Hoeckton
- e Roston
- f Witte ton op de Steert
van Romaerder plaet
- g h De Tonnen op Pel
groms Sandt

op de Eyder.

- k De uytterste Eyder ton
- l Ton op de Hondt
- m Baken op de Hondt
- n Yseren Hendrick
- o o o Bakens op den
Yseren Hendrick
- p De pye na de Elve
- q Hordemer Sandt
- r Eylandeken Bulhoofden
- s Bakens op de Hulck
- Op de Iaa en Weier.
- a De Steenbalgh
- b Bakens van t Wadi-
- c Senten of Toppe plaet
- d De Iaa ton
- e Ton op t Hoofst
- f Ton op t Coers
- g Allem tonne
- h Ton op Bollenfyl
- i Bakens op Bollenfyl
- k Eerste ton op t Vlack
- l Het Vlack
- m Cappelmans Sandt

Duytsche mijlen 15 in een graadt. Lienes d'Almagna 15 en un degre
Engelsche en Fransche mijlen 20 in een graadt Lienes Anglet Frans. 20 en un deg
Spansche mijlen 17½ in een graadt. Lienes d'Espagne 17½ en un degre

Pascaerte vande Wester en Ooster Eemsen.
De Weser, Elve, De Eyder met de ander
Seegaten tusschen Amelandt en de Eyder.

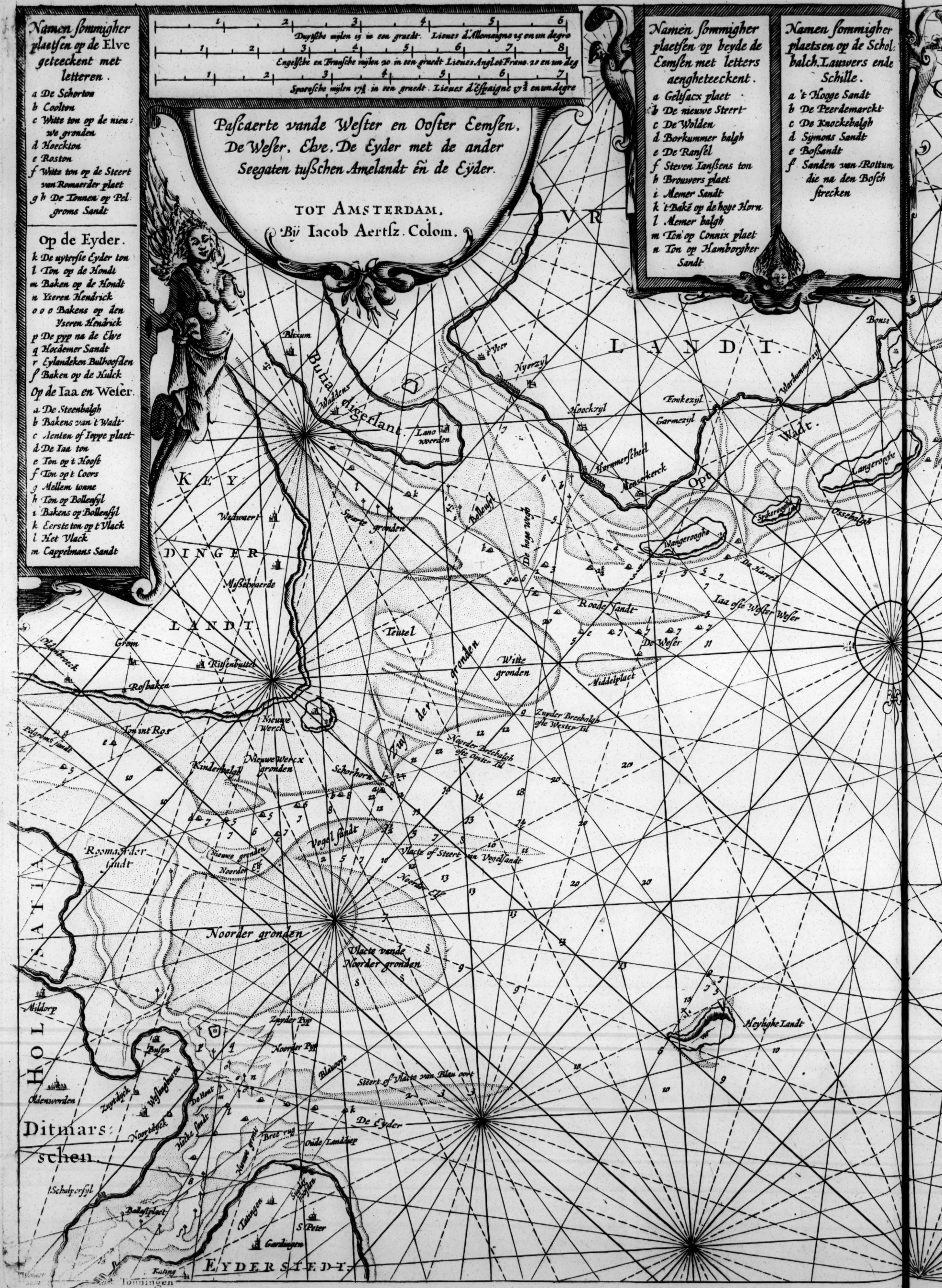
TOT AMSTERDAM.
Bij Iacob Aertsz. Colom.

Namen sommigher
plaetsen op beyde de
Eemsen met letters
aengheteckent.

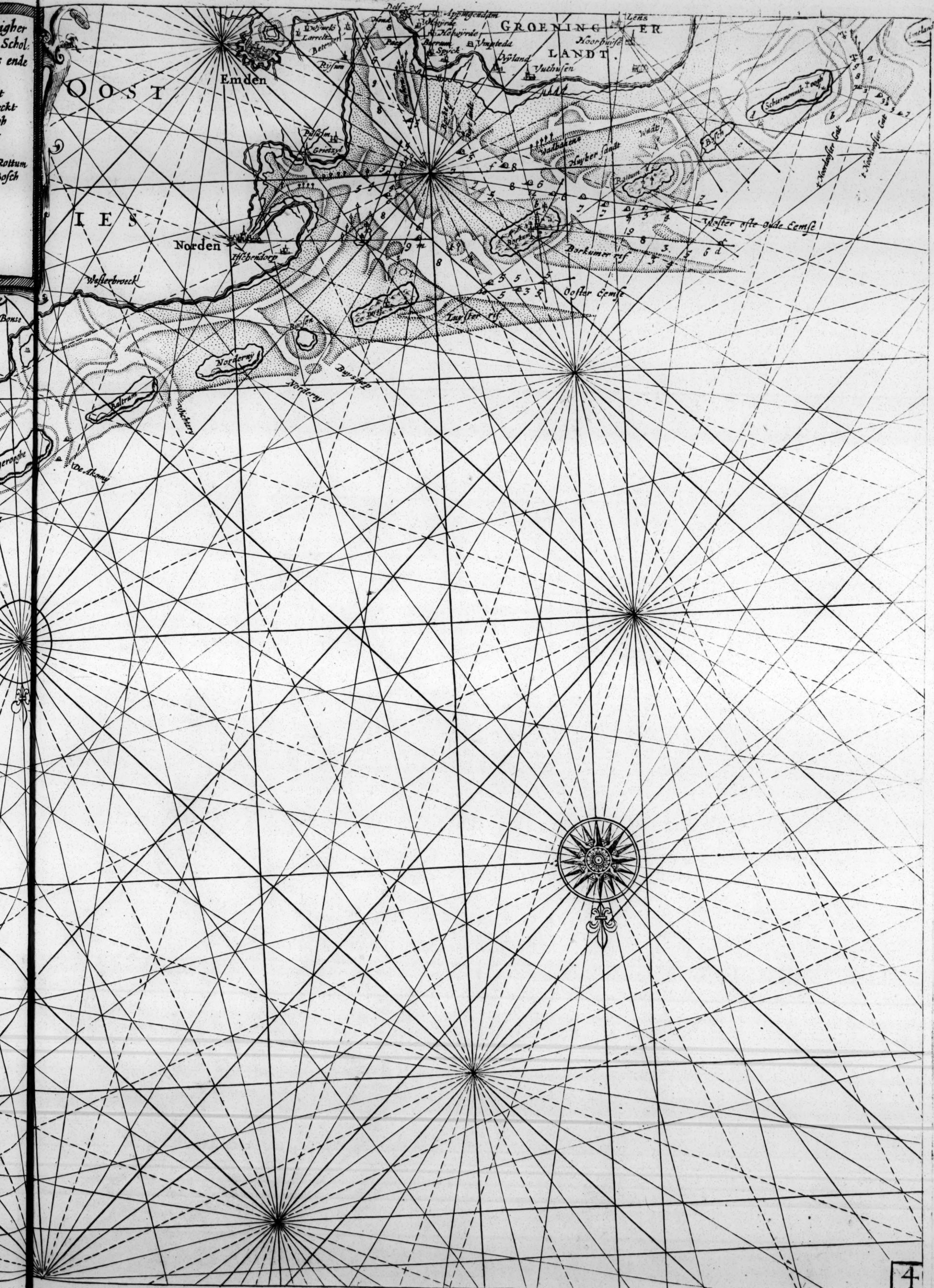
- a Gelfax plaet
- b De nieuwe Steert
- c De Wolden
- d Borkummer balgh
- e De Ransel
- f Steven Ianssens ton
- h Brouwers plaet
- i Memer Sandt
- k t Bak op de hoge Horn
- l Memer balgh
- m Ton op Connix plaet
- n Ton op Hamborgher
Sandt

Namen sommigher
plaetsen op de Schol-
balch, Lauwers ende
Schille.

- a t Hooge Sandt
- b De Peerdemarcht
- c De Knoekebalgh
- d Symons Sandt
- e BosSandt
- f Sanden van Rottum
die na den Bosch
strecken



igher
Schol.
ende
t
echt
h
Rottum
hofsch



and you shall runne within through Gelt-sack-plate upon 5, 4, and 3 fathom, afterwards upon 8 fathom, then you shall come by the fourth black buye, which doth lie upon 4 fathom.

Borckum-mer-Riffe. The Burckummer-Riffe is on the out side, and flat upon the end. When the Capes upon Rottum doe stand southeast from you, there you can come over along the Riffe. You shall have then upon the taile off the Riffe, with low water not lesse then 7 elles water for it is flat and broad, on the in-side it is very shoare and steepe, and goes in with a Bight but you may well goe thereon upon the lead.

From the fourth buy, till in the Bight of Rottum, is the course east southeast marked with F. and lieth upon 7 fathom, from this unto the high-plates-buye, is the sixth black buy, marked with G. and lieth upon 7 fathom, as also forth unto **Huyberts-buy.** Huyberts buy (H) is the course east and by south, when the cape upon the south side and the steeple come over against another (which stand southsouthwest from each-other) then you are next unto Huyberts-buy, goe then eastsoutheast on, till the innermost Huyberts-buy (I) which lieth also as the first Huyberts-buy upon 6 fathom, on the west-side of those buyes have you, Huyberts-plate, which is now seperated from Huyberts-sand, and men may under saile it with low water, it is in the fareway 12, 13, and 14 fathom water, from the innermost Huyberts-buie (I) into the buy before the Wat, called Steven Iansz-buy (K) is the course southeast, and lieth upon 8 fathom, being past the buy upon Huyberts-plate, you must turne somewhat off, and have a care off Borckum and Mieuwen-steert, which shooteth off from the Woldes or the South-end of Borckum which men may under saile in 5 fathom, when they will be in that fare-water.

Westward from Steven Janfons buy stand five Beakons, there by south goeth the Wat in, north and by east, almost so far from Steven Janfons Buy, as the innermost Huyberts-buy doth lie from Steven Janfons-buy, there shooteth also an out-point or Riffe out, called Ransel you may under saile it upon 5 fathom, the marches of this Racke, (and for to have a care of the taile or Ransel) are these: upon the South end of Borckum lie two little Downes called the Wolden, keepe the steeple off Borckum on the west-side of the little Downes, then you shall not fall into Ransell, in this Rack is it deepe 9 and 8 fathom, from Steven Iansfons buye unto Doecke buy (L) is the course eastsoutheast, you doe find there by South of this buy a Beakon (M) called Ruyte Baken, the buye lieth upon five fathom, and in the farewater it is deep three fathom, the flood falleth very strong behinde this buy into Deeke-gat, where off you must have a care. From Doecke-buy unto the Camper-buy, is the course eastsoutheast, marked with N; from thence unto the buye of Eems-horn O is the course Southeast, doe lye

Ransel. bot upon 5 fathom, in the midft off the fare-water, is it deep 7 fathom; the marches off the buy off Eems-horn are these: When the Cloyster of the Dam (a flat Church) comes a like with holwirde, then you have the length of the buy, then stand these marches about south and by west from you, from the buy on Eems-horn, which stretcheth southeast, you doe find on the South-wall five Beakons, sail al beyonde the same, from thence on the Groniger-Dike, southsouthwest, untill you get the Church of uytwirde and the Cloyster of the Dam one in another, turne then next unto the side of Delf-file, for being past Boecke-buy, you may goe forth on the Westwall, unto Otterdum, upon 5, 6, and 7 fathom; and doe not come nearer for the same is very steep; the Eastwall, in sailing up, you may goe on by the lead upon 6 fathom, behinde a Plate, called the Hondt, an hard sand, and more inware lieth also another plate, called the Paep, being also an hard sand, & runneth through betwixt Killetie, but the Wester-wall is weake and Clay-ground, till unto Otterdum, you must keep all the West-wall, and follow the Beakons which doe stand there all along, the some Rack stretcheth southsouthwest and south and by west, and also beyond in the Bight southsoutheast, and by the land of Groningen Southeast.

The Easter Eemse.

Runne upon the grounds of Borckum upon 5 fathom and set the steeple of Borckum, with the new cape (short by made there) over against another, then they shall stand south from you, or coming out of the west, keep the steeple upon Iuyft, east and east and by north from you, then you doe finde the first buy, or utmost buy, upon five fathom, from the utmost unto the second is the course east and by north, from the second unto the third eastsoutheast upon 5 fathom, these doe lie al upon 5 fathom, in the farewater it is first 5, 6, 8, and 10 fathom deep.

The end of the Iuyfter-Riffe, betwixt the utmost and the

second buy, is on the inside so shorre or steepe, that you may not goe upon the lead, but more inward from the second buy is it flat, from thence you may goe in good order upon the lead.

The third buy lieth upon the point of Brewers-plate, on the east-side of Borckum, which you may under saile, the taile is on the northside very steepe saile so forth eastsoutheast on, till you come next the Beakon upon high horn, there is a good Road upon 5, 6, or 7 fathom, and good to lye fort southerly wind, though with a flood, you may well goe one east and somewhat northerly, otherwise you should come within the point of the foresaid Brewers-plate; the Iuyfter-Riffe lieth inward from the second buy or flatnesse, so that you may goe on there upon your lead in 5 or 6 fathom; when you are a little by east the third buye, goe then southeast on, there besides is the Easter-Eemse wide and broad, the east-end of Borckum is flat, you must have a good care upon your lead, when as you saile there out or in with a deep-going Shipp, and so you doe come with an southeast course on the Kings-plate, there upon the point or taile lieth a buye, and upon the plate a Beakon, leave this buy and Beakon on Starboard. At norden in East-Friesland stand two steeples close together, whereof one is thick and great, and the other low and smal, when these steeples come with the north-end of Bandt (a little iland upon the Wat) besides each-other, you have then the buye upon Kinhs-plate these are good markes there along, and when the steeple of Iuyfter comes northnortheast from you, that are good thwart markes of the same buye.

From the buye upon the Kings-plate, unto the buy upon the Westerbalgh, is the course southeast, so long untill you have both the Capes upon Bandt over against each-other then is the buy southsouthwest from you; From the first buy of the Westerbalgh unto the second, is the course all southsouthwest, also is the whole Westerbalgh, you can doe no harme when you keep both the Capes upon Bandt standing over against each-other, for to runne out of the Balgh, but upon the last you must goe on somewhat westerly. From the Balgh-beakon, to the beakon upon Eems-horn, is the course South and north, to saile from these Beakons through the Gaetjen (or hole) unto knock, is the course Southsoutheast, and from thence unto Loeger-horn East.

To the east of Iuyft lieth Buys, the shortest and smallest Island that is upon all this coast. It riseth up in two Hommocks, where of the Hommock, which is the most easterlyest is the highest and sharpest.

Betwixt Iuyft and Buys goeth in the Buysdeepe: the Worcester Counsell or Embden was wont to set it with buyes, but it is donne no omre, in regard it doth so oftentimes shift.

Two great leagues to the eastwards of Iuyft Buys. **Norderney.** betwixt them both lye that little Island Buys. Norderney is to be known by a broad flat tower, which standeth upon the west end, but sometimes men can hardly perceive it. About the midft of the Island, nearest the east end lieth a high white sandhill, thereby it is best to be known. For there the Land is al ful of Hommocks. Betwixt Norderney and Buys goeth in a channell, called the Norderdeepe, or Norderney.

A great league to the eastwards of Norderney lieth the Island Baltrum, which is about two leagues long, a little shorter then Norderney. Upon this Island standeth no speciall thing, whereby men may know it: but upon the east end a high sandhill, which is sharp a bove, the west end is low sandhilles. When the foresayd high sandhil is southeast and by east from you then it is round to see to. Upon the West end there goeth a swamp through,

Betwixt Baltrum and Norderney runneth in a channell, called the Wichterie, there is no certainty to be written of it, that men may trust to, sometimes there is two fathom water, and more, and sometimes no more than foure, or five fote.

The island Langeroogh lieth a league to the eastwards off Baltrum which is foure great leagues long, and hath on the off-side a faire strand, an three or four sandhilles, where by men may know it, which lye from about the middest of the Island unto the west end, a good wayes one from the other, the tops of them are plaine and flat. Betwixt Langeroogh and Baltrum goeth in the Acumy, where in lye two buyes. It is no channell for great ships, it lieth out alongft by the foote strand of Langeroogh, first northeast, and then somewhat more easterly, but it is not to be trusted to, because it altereth and shifteth very often.

Betwixt Langeroogh & wrangeroogh lieth the Island Spykeroogh which is about a league long. At the east end there was wont to lye a little Island, good to be known, called Lut-tick Spykeroogh: which is now altogether gone. Upon Spykeroogh standeth noting, whereby men might know it,

L but

Oxebalg.

Wranger-
oogh.

but it is a black land, with Hommocks and Nobbes like to the other ilands: betwixt Spykeroogh and Langeroogh goeth in the Oxebalgh.

Wrangeroogh lieth two great leagues to the eastwards off Langeroogh, which is a great league long, bein a little plaine white iland: Upon the east end lie high broad white sand hil-les: Upon the west ende the Earle off Oldenbourg hath cau-sed to be made a great thick tower, with 2 spires, when they stand on right in the other, then you are by the outer buy off the Wefer; the foresaid towre, men may see two kenning of at Sea. Betwixt Wrangeroogh and Spykeroogh goeth in the Harrel, about southfoutheast, but it is not to be trusted becau-se it shifter very often.

The Acumy and Harrell are set both with buyes by the Wor-cunfull of Embden: These channell serve not but for small ships, like as all the other, lying betwixt the Easter-eems and the Wefer.

The land lieth from Bornriffe to Wrangeroogh eastnorth-east and westsouthwest 29, or some will have it 30 leagues.

For to sail into the Iade or wester Wefer with a southerly winde, runne to the strand of Wrangeroogh in foure fathom, with a westerly winde runne no further then five fathom, and lead it in so by the strand of Wrangeroogh, in 4, or 5 fathom, untill you come a good wayes within, or to the end off foote strand of Wrangeroogh, there you shall finde the first buye in five fathom at low water: Menfer-church shal then stand south from you. Thwart of this first buye the redde-sand is very steepe, which you must leave on the larboard side, and the buye on the starboard side, when you come in. Thwart off this first buye commeth a taile, shooting off from the South-shoare, that is the innermost point of the Stonebalgh, which men might, at unawares sail within in three fathom and an halfe, or foure fathom, the first buye is laid upon the point of this taile. The Stonebalgh goeth in to the eastwards off Wran-gheroogh the south side where off is steep, but the north side flat, which men may found. In this Balgh it is ten foore deepe at low water. From the first buye to the second, and alongst to the third, the cause is east, the second buye lieth in two fa-thom and an half: The third, that is the Jade buye, lieth in three fathom, upon the shouldest off the High-waye. It is very uneven betwixt the first and the third buye, you shall get wise depth of five or six fathom and then again 2 fathom or 2 fathom and an half.

For to saile from the Jade to the Wefer, then saile by the third buye over the shouldest of the high way on eastnortheast to the Mellembuye, and you shall finde at low water upon the foresaid shouldest place, or by the third buye, no more water then 9 or ten foote, and being over there you shall get againe deeper water, and then you are in the Wefer: Reckon well your tides for the ebbe falleth very strong northnorthwest out at the Jade, and the flood to the contrarie, very hard in-wards, so that you can hardly stemme the tyde, when the wea-ther is somewhat calme, whereof you must be very carefull.

For to saile up into the Jade, leave the foresaid third buie on the larboard side, and go from thence most south up, unto the point off the Deyke, called Hommerscheel, when you are come by the Dyke, there the lade is wide and broad, without the foresaid Dyke standeth a beacon or two, for shippes that are bound over the Wadt: If you will saile further, up into the Iade, then keepe the west shoare, untill you come thwart of the church without a steeple, which standeth by the Dike, there you must leave the west shoare, because of the Aenten or Iepe-plate, which shooteth of from the Veer, alongst the west-shoare, and sometimes lieth drie at low water. The west shoare lieth most southeast somewhat southerly.

A south and north moon maketh the highest water upon the Jade, and it floweth with an ordinary tide 2 fathom and an half up and downe.

The Wefer.

For to saile up the Wefer, come no nearer Wrangeroogh then seven fathom, being in seven fathom, then edge off from the shoare into 11 fathom, and you shall finde the first buie at the comming into the Wefer, lying in seven fathom upon the taile off the Red-sand, Menfer Church (that is a flat Church without a steeple in Vroukenland) is then southsoutheast from you. Being thwart of the first buye, and that the west end off Wrangeroogh is southsouthwest from you, then you run over the taile of the Red-sand in 5 fathom.

From the outermost buye to the second, third, fourth, and south side (to wit the Red-sand) nearest each a point different from Menfer church, so that Menfer church lieth from the se-

cond south and by east, from the third south, from the fourth south and by west, and from the 5 southsouthwest. The fifth buye is called the buy upon the Head, for to know that from al the other buyes, there standeth a staffe upon it of a halfe fa-thom long. With a white knotte upon it. Over against the buye upon the head lieth a white buye on the white grounds. Be-twixt all the foresaid buyes you must reckon wel your tydes, the flood cometh out of the northwest, and falleth alongst over the Redde-sand, & the ebbe to the contrary. The right deep thwart of these foresaid buyes, in the comming in is 11 fa-thom, but thwart of the buye upon the Head, 5 fathom at low water.

Right before the Wefer lieth the Middle-plate, the Easter-^{Middle-plate} most or the Inner side beginneth right to the northward of the buye upon the Head by the white grounds, and lieth alongst the reach unto the third buye, to reckon from without, and is on both sides flat for to found about. On the west side of the foresaid plate lieth a white buy about from Menfer Church, which you must leave in comming in on the larboard-side.

For to sail from the buye upon the Head, out again to the eastwards of this plate unto the Elve. Then found it out about the white grounds, in 4 or 5 fathom, until you be out in the sea.

For to saile further up into the Wefer, the course from the buye upon the Head unto the 6 buye is S. E. and N. W. Men-fer Church shall then lie from you southwest and by south, the Wefer is thwart of it about 20 fathom deep. From the sixth buye to the seventh, that is, the buye upon the Cours, or the Wapper buye, or the southwest buye, because Menfer Church lieth southwest off from it, the course is southeast. The Iade buye lieth about south, or south and by west from this buye. From the buye upon the Cours unto the Mellem buye the course is yet southeast, which you might saile within are una-wares is sixe fathom. Menfer Church liet off from it south-west and by west. From the Mellem buye to the buye upon Bollenzile the course is southeast somewhat easterly, you must reckon your tides there verie well, because the flood falleth exceding hard in to the west shore, Langworder Church lieth right south and by east from that buye upon Bollenzile, over against it upon the point of the black grounds lieth a white buye, come no nearer to it at half flood then 4 fathom and an half, you might unawares sail within that point (in sailing in) in 4 fathom. From the buye, upon Bollenzile to the beakon upon Bollenzile the course is southsoutheast, or southeast and by south. Langworder church lieth about south from that bea-^{buye upon Bollenzile} kon, you must leave it on the starboard side comming in with-in that beakon upon Bollenzile is a good roade for a westerly winde. From the beakons upon Bollenzile to the first buye upon the flat, the course is southeast til you come somewhat beneath the beakon, and then alongst eastsoutheast. The marks of the first buye upon the Flat is, when you can see through the belhoals of Langworder steeple, then you are thwart of the first buye, Langworder Church is then from you somewhat more southerly then southsouthwest. From the first buie upon the Flat to the second, the course is e. s. e. Betwixt these two buies stande five beakons on the larboard side, up-on the black grounds. From the second buie upon the flatte to the Meyland the course is southeast and by south. Being come thwart of Wadnis or the Meyland, sail then close along by the green shore, untill you come within Blixem, there is the rode for great ships that are bound to sea.

Like as upon the Jade, so also upon the Wefer a south and north moon maketh the highest water, it floweth there also 2 fathom and an half up and downe.

To the eastwards of the Wefer lie the southgrounds of the Elve, there go in 2 faire deep Balghs or Creeks of 10, 12, and 13 fathom. The Till, called also Broadbalgh, is the wester-most, and lieth so far to the westwards, that men can but even see the New-worcke from thence.

If it shold happen that comming to the eastwards off the Wefer, you should be beset upon the southgrounds, being a left shore, and be in danger, then saile to the southgrounds in 4, 5, and 6 fathom, but not much nearer also, for they are somewhat steepe. When you (running so along by these grounds upon the same course) shall get 8, 9, yea 10, or 12 fa-thom soft ground, then that is certainly of the Broadbalgh or Wester Till, take then the sounding of which side that you will, and found it about by the grounds in 4 or 5 fathom, and you shall find a mongst the sands smooth water, and good rode, and may lie sheltred for all winds. The wester Till lieth in first E. S. E. alongst by the north shore it is deepest, on the S. shore you can not sail within, any tailes, in sailing out, but you may in sailing in: when you come somewhat further in, lieth up more to the southwards: there are divers Balghs or channells,

Wester Til. channells, where men may saile through that are acquainted. The Easter-til or Broadbalgh lyeth betwixt the Wester-til and the Hondtbalgh, which runneth in 7 fathom into the eastermost point, (or the old Scorhorne) that is a taile which lieth off a good wayes, and which you might at unawares sayl within in 7 fathom comming from the westward. This Till lieth in also (like as the other) first eastfoutheast, but a little further in more easterly. Here also you may take the sounding of which side or shoare that you will.

Being come within, you shall get smoot water of the sands for all winds. In this channell is not lesse then 7 fathom water.

Hondtbalgh. The Houndtbalgh lyeth right into the westwards off the Steep-buye or Schorhorn. If you will goe in there with small shippes for to saile over the Wadt into the Weser, then goe (when you have the Steep-buye) in southfoutheast. The Hondtbalgh is without indifferent wide, keepe that course, untill you come thwart of the beakons, which you must leave on the starboard side, you may well found in about the off-side of the Schor-horne, but not the west side, by it lye plates, which you might sayle foule of in 9 fathom, in comming in, but on the Schor-horne you can not doe amisse.

Holy land.

The Iland Holyland, and the outermost buye in the Weser, lye one from the other, south somewhat westerly, and north somewhat easterly. When it is cleare and good light, you may see Holyland, when you lye in the Weser, by the buye upon the head. Holyland and Bornriff lye one from the other southwest and by west, and northeast and by east according to the common opinion, two and thirty leagues. When you come from the westwards, and begin to get Holyland in sight, it sheweth it selve with a high reddish steep point, which is flat above. For to anchor or make rode under Holyland, comming from the westwards, then runne to that land in tenne or twelve fathom. When you saile towards the south point, and come somewhat near the land, you shall espie a rock, like unto a small towre, close by the high land, called the Monck, which is almost so high as the high land. About southfoutheast an English mile, or a little more from that rock, lyeth a rock under water. If you keepe your self in eight and nine fathom, then you run without this rock, and can not take any hurt of it: When the Monck is covered of the other land, then you are thwart of this funcken rock. When the foresaid Monck cometh a handspikes length, past or without the other land, there is the road; and good anchoring in ten or eleven fathom, the ground is there faire and cleane, except it be of wracks of lost ships, or lost anchors, which are there may. Lying there in nine, tenne or eleven fathom, you have shelter for a west-southwest, northwest and north windes. From the poynt where the Monck standeth by, shooteth off a little riffe from the shoare, which men may found in three fathom, you may also runne in five fathom from the shoare, and sayle cleare of the foresaid funcken rock, to wit, through betwixt the funcken Rock, and the little riffe: but if you runne into deep water, to wit, in seven fathom, you shall runne right upon the funcken Rock. In eight or nine fathom you doe runne about without the funcken Rock.

From the north side of Holyland lieth off an evill Riffe, almost a league into sea, so that you can not come no nearer the whole north side, then in nine or then fathom. If you will goe about to the northwards of Holyland, being come so farre that the east end of Holyland come to be south and south and by east from you, saile then freely unto the Scholwers point, that is a flatte point, which you may found in 5, 6, and 7 fathom. If so be that you will runne in eight fathom off from it, you shall runne above two great leagues from the shoare. The right fareway betwixt the Hever and Holyland is not more then nine or tenne fathom deepe. When you come about the poynt to the rode, and that Scholwers point lye northeast, and the rock southwest from you, there is good lying in 5 fathom.

South-haven. Scholwers point is the point where the South Haven lyeth within, which lyeth from the high land about east into Sea. From the outermost end of Scholwers point lieth a banck off three fathom, unto the point where the Monck also standeth, within it is very good lying for shippes of little draught, that is called the South Haven of Holyland. A Southsouthwest and northnortheast moone maketh there the highest water.

Of the Elve.

The Rode of Holyland, and the outermost buye of the Elve (called the Schortunne or the Steep-buye) lye right Southeast and by east and northwest and by west eight leagues asunder, which lieth right to the northwards of the Schorhorn, that is

the outermost point of the New-workes grounds, on the south side of the Elve, the right deepe of the Elve runneth in alongst to the northwards of it. On the north side of the Elve lie the North ground, which lie somewhat flat far off to Seawards upon the northwest side. The South end of the north-grounds, called Voghelsand, runneth from the foresaid buye a good waies west and by north into Sea, with narrow taile off perfect harde sand, about a halfe league broad, which waxeth by little and little the farther from the shoare the deeper. Three leagues from the foresaid buye, there is upon it eleven fathom water, when you saile on north from the steep-buye, you runne over it in three fathom, or three fathom and a halfe, but it doth soone deepe againe in five, seven, eight and tenne fathom, soft ground, that is in the creeke off the North Elve. To the Southwards of that a foresaid Voghel-sand, in the right fareway of the Elve (for him that commeth from the westwards) it is also somewhat soft ground, and fourteene and thirteene fathom deepe, to the southwards of it, towards the souther or Steepe grounds, the ground is againe very hard, and the grounds very steep, you may not come nearer them (especially by night or darke wether) then in eleven or twelve fathom, if you come nearer to them, you might saile foule of the wester Till, or Souther-broad-balgh, which runneth up to the southwards into the grounds to nothing.

When you come from the westwards, and saile to the Elve, you shall finde betwixt Holyland and the Weser, and thereabouts somewhat to the eastwards, depth of twenty fathom, untill that you come well halfe wayes to Holyland, towards the Steenbuye, then it doth begin to shewld from eighteen to sixteen and fourteen fathom, close by the Steepbuye it is 12 fathom deep.

If you come by night alongst by the steepe or souther-grounds, with a southerly winde in twelve or thirteen fathom, and goe on east and by north, you shall at last meet with the sholding of the New-workes-grounds, right to the northwards of the Hondtbalgh in eight and seven fathom, there you must then let fall your anchor, for to stay for the day, and you shall finde your self not farre from the buye. With northerly windes you must anchor further from the south shoar in the foresaid showlding in eleven or 12 fathom.

To the northwards of the foresaid narrow taile, or showlding, which lieth off from Vogelsand, runneth in a great bight or Slenck into the norther grounds, called the Norther Elve, it is in the going in somewhat within, so broad that you may there in turne to windwards, but within it runneth narrow and sharp too; and at last to nothing, (ending almost against the whitebuye, which lieth upon the Elve, upon the taile of the New-grounds) it is going in more then halfe wayes thirteene and twelve fathome deepe, and soft ground, verie much like the right Elve. It happeneth oftentimes by darke wether that the shippes (thinking that they are entred into the right Elve) runne in there, sometimes with danger, especially with west-northwest windes, for they must come out there back againe. When you saile of from Holyland on eastfoutheast, you shall have depth of twelve or thirteene fathom, being a league off from it, that you leese the white cliffe out of your sight, then you shall get one eve depth off thirteene fathom, and soft ground, all alongst untill you come within the foresaid north Elve. When you shall perceive that you are entret in there, you may (when the New-werke is more southerly then south-east and by south from you) run alongst over the taile of Vogel-sand in 5 fathom, and so come against the Steep-buye upon the right Elve.

For to set sayle by night from the road of Holyland, the course is southeast and by east, then you shall run over the foresaid taile of Vogelsand in seven and eight fathom, and somewhat hard sandy ground. If you then run a little more southerly, you shall get againe twelve and thirteene fathom, and somewhat soft ground, that the right deep or channell of the Elve betwixt Vogelsand and the steep-grounds. If you runne then more southerly, you shall get againe somewhat hard ground of the Souther grounds, which are (as hath beene here before said) very steep and hard, when you come neare them in twelve or eleven fathom, you must edge off againe from them unto twelve or thirteene fathom, and alongst by them towards the steep-buye, unto the foresaid showlding of the New-workes grounds, and there stay for the day light.

When you come by day from Holyland or from the westwards, and that you get New-worke in sight of you bring that and the Cape one in the other, and sayle so right in with them, then you shall finde the steep-buye, which lyeth (as hath beene already sayd) towards the south land on the side of the Schorhorne the outermost poynte of the

New-ground.

New-grounds in ten or eleven fathom. From the Steep-buie to the Kool-buie, that is, the second buie, the course is due east, which lyeth in eight fathom. Upon the New-work stand three country mens houses, the middlemost of them, and the steeple of the New-worke come one in the other when you come to the second buie. The third buie lieth in six fathom, from the Kool-buie east and by north some what easterly, but nearest east and by north. The fourth lieth in five fathom from the third, east and by north. Betwixt these buies a little within the third, runs a deepe Creeke east southeast into the New workes-grounds, called the Kinder-balgh, which is wide at the entring in, and at half flood well nine fathom deepe, but runneth at length altogether drye to noting. Hee that cometh running alongst by the south-grounds, might lightly get in there, therefore the third buie lyeth a little further off from the South shoare, because men should avoyd that Creeke. Betwixt the third and fourth buie on the north side of the deep lyeth a white buie in three fathom, upon the tayle of the Neu-ground, which men might saile within, when they come inwardts, that you must leave on larboard side, and all the black buies on the starboard side.

The foresayd white buie and the New-worke lye north-northeast and southsouthwest one from the other, to the eastwards of it the north side is very steepe. The fifth buie lieth in three fathom and a halfe, or 4 fathom, and lieth from the fourth due east.

The sixth buie, that is the poynt buie, lieth in six fathom, from the fourth and fifth due east. In the right deep to the northwards of these foresayd black-buies from the Koolbuie to the poynt buie in the right fareway, it is all alongst sixe and seven fathom deep. From the poynt buie to the buie in the Rosse, the course is southeast which lieth in 7 or 8 fathom, when the Rosbeakon commeth to the little steeple of Gron or Groen, then you are thwart of this buie. Halfe wayes betwixt the point buie, and the buie in the Rosse, lieth yet another buie on the south side, which is there betwixt them both exceeding steepe and needle too. Right east southeast from the point buie over against the buie in the Rosse, somewhat further in wards, lieth a white buie upon the tayle of Romaerl plate, which men might at unawares sayle within, in foure or five fathom when they saile upwards. When the little sharpe steeple of Woord commeth to the westwards of Oldenbrock (that is a church with two spires upon one steeple) then they are south from you, from thence inwards you may found Romaerl plate in six fathom without danger, otherwise it is on the off-side very steepe. From the Rosbeakon to Brunsbuttell are five leagues, betwixt the buie in the Rosse, and the buie upon Romaerl plate begins a sand ly ingright in the middest alongst the fare way about two leagues long, called Pilgroms-sand, upon it is alongst no more then two fathom water, or a little more, upon it lie three black buies, and over against it on the north side, two white buies, you must saile through betwixt them, alongst to the northwards of that sand, being past it, you shall come upon the flat. There lye yet two buies which you must leave also on the starboard side in sayling up, before you come to Brunsbuttell. All the depths here before mentioned, are reckoned at halfe flood,

From Brunsbuttell to the buie upon Salshorne, or Friburger-land, the course is east, and east and by north alongst by the north-land. From Salts-horne to the buy againg the Steur east and by south, and east southeast, from the Steur to the buie upon Gringer-oorts-sand southeast, and southeast and by east, that lieth against Bilenburg more then halfe wayes in the deepe. Betwixt this buie and the buie upon the Steur lieth another buie in the fare-way. From the buie of Ghringer-oort to the buie upon Stader-sand southeast and by south, and southsoutheast. This buie you must leave on the starboard side. From Stader-sand to Willems-flit, or the buie upon the Luye it is southeast, and southeast and by south and from thence to the buie upon Terloo eastsoutheast. From thence to the buie upon Hanneball, the course is east and west. From Hannebal to the buie upon Blanckenes sand east and by north, you must keepe that buie right with a great tree, and then run alongst by the north land untill you bee past the buie.

From Blancknesse sand unto the buie in the bight, the course is east southeast, and from thence unto the Eckhout east and by north in the right channeell it is there three or 4 fathom deepe, there lye the great ships for to lade ant unlade.

The Eyder.

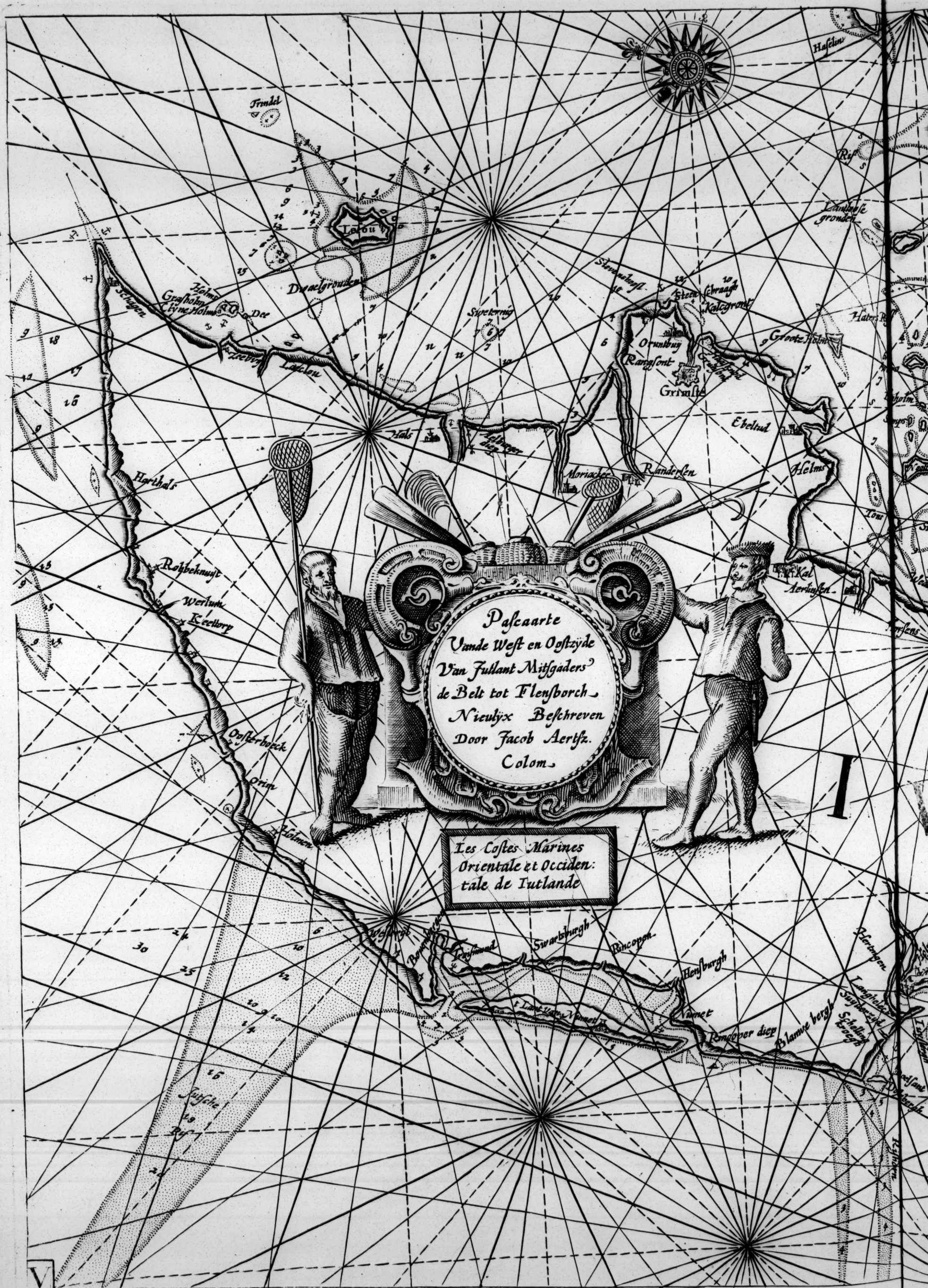
Six leagues to the northwards of the Elve lyeth the Eyder, with many showlds lying farre out without the land, chiefly and most on the sout side, on the north side of the deepe al-

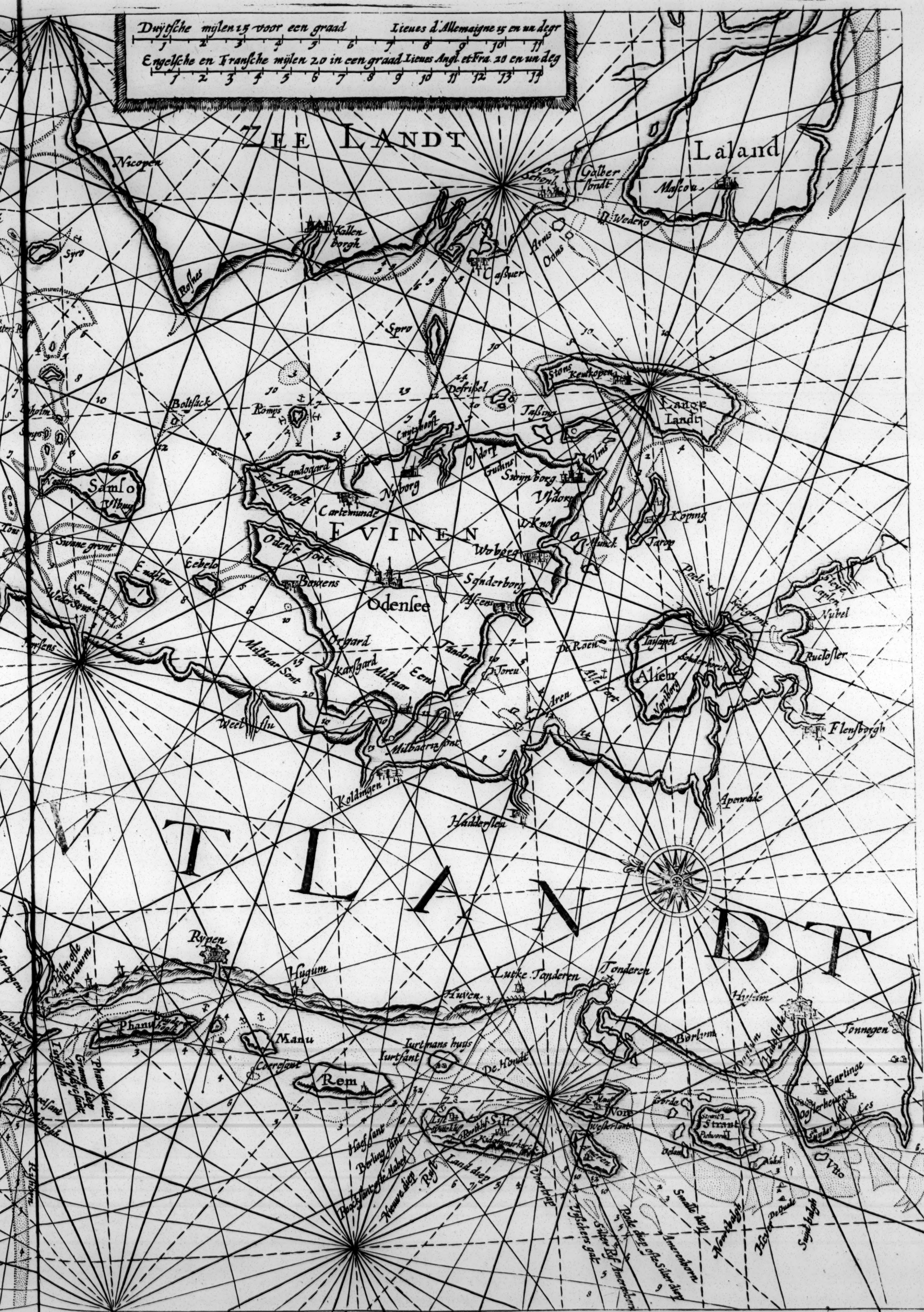
ongst by the land of Eyderstee liet a long sand called the Broad-back, or New-grounds, on the south side lye Blavoort, the Iron Hendrick, the Hound of Hechland. To the southwards of Blavoort, and the Iron Hendrick, about a league to the southwards of the mouth of the Eyder, goeth yet a Deep in, called the North pipe, where men may sayle in, and come out againe by the Hound upon the Eyder. In this Eyder lye on the south side of the Deep seven black buies, which you must leave all (in sayling in) on the starboardside, and on the north shoare, which you must leave on the larboard side. The outermost buie lieth from the steepe buie right north, and from Holy land east or a little more nootherly 7 or 8 leag. When you fall with the land with that course you shall espy to the northwards of te Eyder, upon the land of Eyderstee, a sharpe steeple indifferent high, called Gardingen, bring that over or to the south side of the little sand-hills lying on the north side of the Eyder, called the Souther-Heads, they shall then stand from you northeast and by north, or a little more easterly, sayl right in with hem so, and you shall fall with the outermost buie, when that then the sharpe steeple of Weslinburen, standing to the southwards of the Eyder in the land of Ditmarsen commeth to be east or a little more southerly from you, then you have the lenght of the fore said buie, and then S. Peters Church upon the Eiderstee to the west wards of Gardingen, not farre from the sea side, shall stand from the north-northeast. Thus, or coming out of the southwest upon the fore said markes of Gardingen, and the Souther-heads, you shall run over the showld of Blavoort, which men do call also the taile of the Hound, lying off from Blavoort almost halfe waies to Holyland. It is also by some called Blavoort, or coming from the northwards, bring the foresaid steeple of Weslinburen aeft or a little more southerly from you, and saile so right in untill that Gardingen commeth to the foresaid souther-heads, or that S. Petres church bee N. N. E. from you, in doing so you shall not misse also the outermost buie. From the outer most buy to the second, thitd and fourth, it is al one course E. S. E. the second lieth upon the showld of the channell at low water in 16 foot, the third in foure fathom, and the fourth in five fathom.

These three last lie alongst the north side of Blavoort, on the south side of the deepe. In sayling in, you must leave them all on the starboard side, and runne alongst to the northwards of them. From the fourth to the fifth, that is, te buie upon the Houndt, the course is east, which lieth thwart of the Hound, on a point which lieth of from Heckesand, which in coming in, men might at unawares saile within alongst to the southwards of the buie, therefore you must leave that also (as well as the former) on the starboard side, and saile alongst to the northwards of it. Betwixt this foresaid buie upon the Hound, and the fourth, lieth another buie upon the north side of the deep, upon the southermost point of the New-grounds, which you must leave on the larboard side, and run about to the southwards of it. From the buie upon the Hound to the sixth, the course is northnortheast, two fathom deep. From the sixth to the seventh and last buie northeast and by north, and the deepe alongst to the northwards of it three fathom. Being past the last buie, follow the beakons, which stand alongst on the north shoare, until you come to Hulck, runne close alongst to the southwards or to the eastwards of them, for to avoid a taile of sand, which commeth off from the east shore, which men might unawares saile within into a Dead-creeke, From the Hulck to Schulperzile, the course is eastsoutheast. In that reach, the beakons stand on the south side upon the Ballast-plate, and you must run alongst to the northwards by them, leaving them on the larboard side. From Schulperzile to Tonningen the course is northnortheast. Before Tonningen the Eider is at the showld, and at low water no deeper then one fathom and a halfe. From thence further in towards the New-town called Frederickstadt, there is depth enough.

The depths here before mentioned are al to bee understood at low water. From Tonningen towards Wollersum, the Eider lieth alongst northeast and by east. From wollersum towards Harebleck N. N. west. From Harebleck towards Reimers-bode northeast. From Reimers-bode towards Nienzile eastsoutheast. From Nienzile to the Nien-veere south.

Betwixt the fourth buie upon the Eider and the fifth, that is, the buie upon the Hound, over against the buie upon the southermost point of the New-grounds, stand two beakons a little to the southwards of the foresaid two buies, the westernmost upon the east point of the Blavoort, or the Iron Hendrick, and the easternmost upon the taile of the Hound. Betwixt these two beakons goeth in through a deepe south-east, or southeast and by east, where you may saile through alongst





alongst by the beacons upon the Iron Hendrick (which you must leave then on the starboard side) untill you come into the end of the North-pipe, which liet from thence about West into sea. You may sound in at the North-pipe, coming in out of the sea by the S. shoare in 3 and foure fathom, untill you come to the foresaid beacons, and then about by them north-west, or somewhat more westerly up unto the Eyder, or else you may runne further alongst by the foresaid south shore, untill you come about the beakon upon Hoedmeersand, and then forth betwixt the Iland Bulheads and Buysen alongst by the Beacons upon Hoedmersand, with many points and bights on to the southwards, and come out at last upon the Old Elvel, about northeast from the New-work against the Newgrounds, which is not well to bee sailed, but of those that are there very well acquainted.

Alongst by the northshore of the Eyder, close to the southwards of the little sand-hills, the southerheads, runneth in yet a Land-deepe, east and east and by north in, and commeth out againe upon the Eider by the Hulck, that serveth not but one-ly for small ships, there remaineth at low water but five foot.

Of the Tydes and Courses of the streames.

Before the Scholbalgh, the Lawers and the Schille, and before the Wester-Eems a southeast and northwest moone maketh high water. Before Embden and Delfzyle a north or north and by east and south or south and by west moone.

In the Easter-eems and Burckumbalgh a southsoutheast and northnorthwest moone. Before the channells betwixt the Easter-eems and the Weser, a south and south and by east, and north and north and by west moone.

In the fareway betwixt the Elie and the Elve, the foreflood commeth out of the north sea, and turneth about by little and little with the sunne, falling the halfe tyde eastnortheast alongst the shoare, and the ebbe westsouthwest.

Before the Weser and Elve, and also in the Eyder a south and north moone maketh high water. The flood commeth there out of the northwest, and the ebbe out of the southeast, and fall very strong over the grounds that lye out there.

Under Holyland a north northeast and south southwest moone maketh full Sea.

Of the Depths about these places, and in wath depths men may see the land.

Schiermonickoogh men may see in 12 and 13 fathom 4 great leagues without the land.

Rottum and Borckum men may see in 14 and 15 fathom.

Thwart of borckum the ground is grosse red sand, mingled with some black. Iuyft, men may see in 13 and 14 fathom, 3 leagues without the land it is 12 fathom deep.

Buys and Norderney men may see from the poop in 12 and 13 fathom.

Baltrum Langeroogh and Wrangeroog, men may see it in 14 & 15 fathom.

Thwart of Botjadigerland, Keidingerland and Ditmarsen, the grounds lye into the top.

About Holyland it is deep 7, 8, and 9 fathom, to wit, on the inner side, but without on the west-side 15, 16, 18, and 19 fathom, in such depth you may see the land of Holyland from the westwards.

Courses and Distances.

The coast alongst these Ilands lyeth eastnortheast and westsouthwest.
From Borckum-riffe to Wrangeroogheastnortheast 16 leagues
From the Rafter-eems or Iuyft-riffe to the Steep-buye or Schortunne east-northeast 20 leagues
From the Eems to Flamboroughhead west somewhat northerly 85 leagues
From the Eems to Bovenbergen north and by east 60 leagues
From the Eems to Holyland the course is northeast and northeast and by east 21, or 22 leagues
From Wrangeroogh to the New-work eastnortheast 8 leagues
From the outermost buye upon the Elve to the Eyder north 7 or 8 leagues

From Langeroogh to Holyland, northnortheast 16 leagues
Holyland and the outermost buye in the wefer lye north somewhat easterly, and south somewhat westerly. The buy upon the Head in the Weser, and Holyland lye north and south asunder 8 leagues
The Steep-buye on the New-work and Holyland lye southeast and by east and northwest and by west asunder 8 leagues
The outermost buy in the Eyder and Holy-land, lye east somewhat northerly northerly, and west somewhat southerly asunder 7 or 8 leagues
From Holy-land to the Holms before Yarmouth, the course is westsouthwest or somewhat more westerly 72 leagues
From Holyland to the Scarbrough and Flambrough head, west or somewhat more southerly 93 leagues
From Holyland to Tinmouth, or Newcastle, west somewhat more northerly 136 leagues
From Holyland to Lie in Schotland, and by north and somewhat more northerly 120 leagues
From Holyland to Boecknes northwest and by west 120 or 121 leagues
From Holyland to Hanglip in Hitland northwest 146 leagues
From Holyland to Bovenbergen, north and by west 50 leagues
From Holyland to the Horne, or Dodebergh, north 32 leagues
From Holyland to Knuyts-deep, or Ryper-deep, the course is north and north and by east 25 leagues
From Holyland to the Deepe of Silt, or Lift, north and by east 19 leagues
From Holyland to Ameren, or Small-deep, the course is northnortheast somewhat easterly 10 leagues
From Holyland to the outermost buye in the Hever, northeast 8 leagues
When you lye by the outermost buy in the Hever, in clear water you may see Holyland.

How these Lands doe shew themselves at sea.

Thus sheweth Schiermonckoogh, being two leagues thwart of from you.
Borckum

Rottum.

Thus sheweth Borckum and Rottum, when you sayle alongst by them, being two leagues a seaboard the land.
Iuyft.

Thus sheweth the Iland Iuyft, being about two leagues of from you.
Northerly Buys.

Thus shew the Ilands buys, and Norderney, being 2 leag. thwart of from you.

Thus riseth Baltrum, when you are about two leagues a seaboard the land.

Thus sheweth Spikeroogh, when it is about two leagues from you.

Langeroogh sheweth it selfe thus when you are about two leagues of from.

Thus sheweth Wrangeroog when it is about two leagues thwart of from you.
White Cliffe.

Thus sheweth the New-land, or New-work Holyland northeast and by east when you are at the entring of the Elve, from you sheweth it selfe thus.

Holyland northeast and by east 3 leagues from you, sheweth it selfe thus.

The third demonstration,

In which are deciphered the sea coasts off the west and east side of Jutland together which the Belt untill you are past Laland and Langeland.

From the New-work, or Steepe-buye to the Hever, the course is north tenne leagues, when you come about halfe wayes betwixt them both, you shall meet with the foresaid sand or raile off Blavoort in the depth of two or three fathom. In this fare-way you must be very carefull of your tydes, that you come not upon the grounds, which lie far out a seaboard the Land, the foreflood falleth there very strong thwart over the grounds towards the land, and the ebbe to contrary.

For to saile from Holiland to the Hever, goe on northeast somewhat easterly, or according as the winde and tide shall be, and runne towards the grounds, untill you come in six or seven fathom, and then you shall espie a steeple which is sharpe, and indifferent high, called Piel-worme, bring that northeast and by north from you, a masts length to the southwards off the southermost Cow-house, upon the little Iland Nuball, keepe that so standing, and saile towards it, and you shall so finde the outermost buye, from that to the second buy, goe on northeast,

and northeast and by east, being come to it, Piel-worme steeple shall stand northnortheast from you. From the second buye alongst inwards, the course is northeast and by east. Being come in so a good wayes, you shall finde two beacons on the starboard side, upon a dry sand, called the Quade, there over against commeth the northbalgh in the right Hever. From the first beakon to the second and third, the course is east and by north, saile all alongst by the beacons, leaving them the starboardside. To the northwards of them betwixt the first and third beakon, it is full of sands and plates, where you might at unawares saile within. By the third beakon cometh the souther Balgh into the Hever. From that third beakon to the two other beacons the course is northeast and by east, being past that you shall come by the greene land on the starboard side, there it is asquare deepe, large and broad channell, from thence you may saile alongst amidst the channell unto Hoesen at the bridge, or anckor there abouts every where, where you will.

Without in the Hever the north side is steepe, therefore

keepe the south side untill you come within the beacons, in the channell is at halfe fload two fathom and a halfe water, and without the channell it is very farre flat. Somewhat without the Hever lyeth also a banck, whereof men must bee carefull when they will sayle in there. A south and north Moone maketh there the highest water.

The South-balgh goeth in to the southwards of the foresaid bank the Quade, in right with the litle iland Utto, and alongst to the northwards of it, it is from without a league and a halfe to saile to Utto. From Utto it lyeth in alongst northeast and by North, and commeth out into the Hever by the third Beakon.

The North-balgh lieth in to the northwards off the Hever about east and by north, or west and by south from Piel-worme, right in with the foresaid litle iland Nuball, which you must leave on the larboard side running in along by it, and so come into the Hever, against the foresaid dry sand, the Quade: you may also (comming in at the North-Balgh) sayle up to the northwards from the iland Nuball unto the end of Strand, till you come thwart off a flat Church, and anckor there behinde the showlds, that is a deepe Balgh or Creek.

Smalle deepe.

Three or foure leagues to the northwards off the Hever, lieth the Smalle-deepe. For to saile of from Holy-land toward it goe on northeast and by north, and runne to the grounds, about west and by north, from the Pielworme the south end off Ameren shall then bee north or thereabouts from you. Seek then to the south grounds, and sound about by them, and there you can not doe amisse, it is flat rising ground farre without the land. On the north side lye many sands, showlds, and points, that lie out, which men might (without good heed-taking) saile within: saile in therefore alongst by the south side north and by east, northnortheast, and northeast and by north, and so you shall find one showld or breach, leave that on the larboard side. If you leave that on the starboard side, you showld runne into a dead Balgh or creek, wherein is at the first at least 7 fathom depth, but runneth at last by little and little to nothing: you may also runne alongst by that foresaid showld by your lead, untill you come within it, comming then thwart off the south end of Ameren, you might unawares saile within the south grounds behinde a shore which shooteth off from the grounds of Vooren, therefore keepe the south side untill that you come thwart of the iland Vooren.

The Red-deepe.

Ameren-borne.

For to saile in at the Red or Silter-deepe, comming from the northwards, or out of the Sea, runne in sight off the iland Ameren. About the middest of Ameren lieth a white round hill, a little higher then the other hommocks in a low plaine valley. Bring that northeast from you, and run in so right with it, untill you come within the riffe that shooteth off from the Voortrap, and commonly is called Ameren Borne, and so you can not take any hurt of it, and then you shall have upon the point of the Riffe not lesse then three fathom water, and within the same riffe eleven, twelve, or thirteene fathom. Saile so in untill that the north end of Ameren be north and by east from you, and then run right with the north end of Ameren, untill you come within the dry sand, and there you may anckor where you please, or saile so farre in as you will, and sound it al alongst by the Riffe. The strand of Ameren is a faire Strand without any tiales that men might saile within. When the foresaid hill upon Ameren is eastnortheast from you, and saile so right with it then you run to neare the foresaid Riffe off Silt, the hill is then also in two parts, the northermost is the smallest.

For to saile in at the Red deepe, or Silter-deepe, comming of from Holyland, and that you have gotten sight of the land, then bring the north end of Ameren north and by east from you untill that you be come in betwixt Ameren, and the Riffe off Silt, runne then in alongst by the Strand of Ameren, untill you come about the north point of Ameren and so along to the eastwards, untill that Ameren lie south and southsouthwest from you. You may not saile into this channell further to the eastwards, for then you come against the iland off Vooren, but you may saile to the northwards alongst betwixt Vooren and Silt, till you come before Lit. In Silter-deepe is upon the showldest three fathom water, being over it, there is againe eight, nenne, and twelve fathom, there lye two risses, or bad sand, the one about westsouthwest from Ameren, dry above water, that is, very farre flat, to wit, in three, foure, or five fathom, it is called of the Juthes the Borne, or Ameren-Borne, although that it be not fast to Ameren, for the Red-deep goeth

in betwixt them both. It is not also fast unto the Voortraps, or that south end off Silt, although it commeth shooting off from it, betwixt them goeth out into Sea a deepe of about a fathom & a halfe, where the fisher men doe dayly goe out through for to fish, especially those of the iland Vooren, this the outermost sand that lieth on this coast. They that use this coast much, either for Rypen, or the quarters thereabouts are very much afraid for this Ameren-Borne, when they come from Holyland, they finde this showld about westsouthwest from Ameren.

The other sand shooteth off from the south end of Ameren, lying about south, and south and by west into Sea alongst the Land, that is also called by many the Borne, or Ameren-Born. He that commeth of from Holyland, & is bound to the northwards, need not feare so much for the showld, for it shooteth out most by the land.

The Haven off Lift.

About eight leagues to the northwards of Silter-deepe lieth the Haven of Lift, which runneth in by the north end off the iland Silt. For to saile in there, comming from the Southwards, runne so long to the northwards in six or seven fathom, that you may see a little iland without the point (which lieth within these outer Ilands) upon which standeth a house, called Jeurtmans house: when that house commeth a mast length without the point off Lift, then goe in east and by south, and eastsoutheast, keepe those markes so standing untill that you be within the point of Lift, edge then up to the southwards about the point, and anckor before the Vuchts house, there it is nine and ten fathom deep. At the entring off the channell lieth a plate or sand, called Haef-sand, that you shall leave on the larboard side, when you come in, it is in the off-side very flat, and good for to sound when you come from the northwards. For to avoyd that when you come from the northwards, edge of so far from the shore, that the red Cliffe come without the sand-hills, or that you may see it plainly: Then you may goe well over Haef-sand, with a ship that is not of a very great draught. Likewise when you come out at the channell off Lift, and are bound to the northwards, saile so farre out that you may see the Cliffe, and then you may goe over the foresaid sand, which lieth from the south end of Rem a good wayes into Sea.

On the south side off the channell off Lift lye also two sands or bancks alongst the shoare not very farre without the strand, the innermost or northermost is called Barling-sand and the outermost, Rust, or Rusting; that lieth to the southwards almost thwart off the red Cliffe, betwixt these sands, and the strand of Silt goeth in the Land deep. For to sail in there comming from the southwards, you must seeck betimes to the strand of Lift about the red Cliffe, because of the Rust which lieth off from the northend off Lift a little without the strand. When that you have the sounding off the shore, and are come somewhat within that red cliff, there shall meet you a flat from the shore, which you must somewhat avoyd, and then you may sound very well: keep all alongst the foot strand, there you can take no hurt of it. From the Inner point off Lift shooteth off also a little riffe, where of you must take heed. When that you are come within the Innermost point of Lift, then you may anckor where you please. If you will goe to Lutke Touderen, then leave that sand (which lieth to the Southwards off Jureland) on the starboard side, and runne through betwixt them both. He that is bound to Hoefsem or Silt over the Wad must leave that sand on the larboard side. Upon Vooren stand two or the threes, these you must keepe over the westernmost church or steeple, and run so alongst unto Vooren.

Betwixt the Rust and Barling-sand goeth a faire deep channell through called the New-deepe, right in alongst to the southwards of Rock-sand, that is a showld which lieth to sea-Rocksand towards off Rust and Barling-sand. For to saile in at that New-deepe, bring the white cliffe upon Silt east, and east and by north from you and run in so right with it, and you shall fall right in the New-deepe betwixt these two banckes, leaving Roock-sand or the Maber on the larboard side of you, run in so alongst by Rust, but come also no neerer to it then in foure fathom, untill that you come into the Land-deep, but comming against the shoare, and getting showlding of the strand, run in alongst by the foot-strand on inwards, as is rehearsed in the description of the Land-deep.

Betwixt Haef-sand, or Haes-sand, and the iland of Rem goeth in yet a little Land-deep of about a fathom and a halfe water. The iland Rem is three leagues long, and very flat on the off-side, so that you shall scarce see that land in sixe or seven fathom.

About

banck of
About eight or nine leagues a seaboard of the Iland Silt lieth another banck a long the shoare of eight or nine fathom, and is about two leagues long, about so lang as the Iland is. Betwixt this banck and the Iland it is thirteene fathom deepe, being in nine fathom a se aboard the Iland Silt, then lieth Holyland about south from you.

Knuys deep, or Ryper-deep.

From the channell of List to Knuys or Ryper-deep the course is north and south about 7. leagues, but Ryper-deepe and Holyland lie north somewhat westerly, and south somewhat easterly one from the other for to saile into Knuys or Ryper-deep comming from the southwards, run about by the flat of Rem and Manu towards the south end of Phanu, called Souther head, or Souther-heigh and so you shall see two capes upon a drye sand, some what to the southwards of Souther-head, bring those capes a little through one another, to wit the innermost or longest a litle or a handspikes length to the northwards of the shortest or outermost, and then they shall stand eastnortheast from you, keep them so standing, and saile right in with them, and so you shall finde the outermost buye, lying on the north shoare in foure fathom in the channell, called Old Ryper deepe, leave that buye on the larboard side, and then goe inwards east and by north, east, and east and by south unto the second buye, you must runne also about to the southwards of it, for thwart of it commeth a showld shooting off from the north shoare, from the outermost cape towards the second buye, which you must avoid.

Coersand. Or keepe the sounding of the south shoare called Coersand, and run by your lead first east and by north, then east, and at last east and by south in by it, you shall finde there upon the showld not lesse then ten foot at low water, and common tyde, there within it is again 6, 7 and 8 fathom deepe. Being past the capes, then luffe up to the northwards, about the sand where the capes stand upon, and anckor there where you please, there it is wide and broad, and also deep and steepe, so that there you can take no hurt. The Ryper ships that are bound out, doe lye there for to stay for a winde. Behinde the Iland Manu it is 6 and 7 fathom deepe, there also men may ride, from thence you may go up the deep to Rypen, but not up along to Rype with great ships, close to Rypen the deep endeth, so that there is a showld neck betwixt both, where there is no more then 6 foot depth. With smal ships you may also saile about be hind Rem towards Jursand, there is a low water about 7 foot water.

Comming from the northwards for to sail into Riperdeepe, you shall also runne on to the south end of Phanu, untill that you shall espye the foresaid capes, and doe then further as is above taught. This channel is not the best channel in foule weather, for it is narrow and farre off should without it: but when you shall be entred into it, you may easily see both sides breack, if it blow any thing hard.

A southsouthwest and northnortheast moon maketh here the highest water.

The Grouwe deepe.

About northeast, or northeast and by north from the north end of Phanu lieth a little Hill, called Luysbergh: a little to the northwards of it lieth a long plaine sand-hil, called Langeleg: from thence lieth the land towards Zuyder-zyt west-northwest and eastsoutheast.

Langeleg. Betwixt the north point of Phanu and Langeleg goeth in that Grouwe-deep. For to sail in there when you come from the southwards, run alongt the Iland Phanu, and about by the north end of it (which is farre flat.) When as that you get deeper water, you shall see three or four hommocks about northeast from you, upon the high land with a little flat steeple, called Holm, or Bruinum Bring that little church a cables length to the northwards of the Hommocks, goe in then northeast, and keep the south shore, until you come within that dry sand, which shooteth off from Phanu, called Smeur-sand, you may run to that upon your sight without doing amisse, but leave that on the starboard side when you come in. The shores are there abouts both of the very steepe, as wel Wildike, (that is the Plate which lieth in the channel) as also Smeur-sand, but without the shoares are flat. When you are past the point of Smeur-sand, edge then over to Wildike, and anckor there untill that you have the lowest water, and then Wardt. you may saile to Hartingen, and go on foot to Wardt, or Woerdt, which lyeth eight or nine leagues within the land, the river is very croocken; upon the which here and there lyeth a Gentlemans house.

A southsouthwest and northnortheast moon maketh there

the highest water, and there it flouweth with a common tyde about a fathom up and down.

From Phanu to Schellingkroegh it is four leagues, be- Schelling-
twixt them lieth Zuyder-zyt a little river of eight or nine foot kroeg.
water. The land betwixt Langeleg and Zuyder-zyt is ragged land with sand-hilles, and rough, being grown with spirie grasse, or heath. If you should fall with the land at Zuyder-zyt, Snyderzyt and that you could not lead it into the channell, then choose the land of Langeleg, you may run to it without danger, keepe in two fathom and a halfe, & you can not saile amisse of this kroeg: four you may sound this land al alongt in 2 fathom and an halfe off from Langeleg untill you come within Schelling-kroeg, but if you run in three fathom, or three fathom and a halfe, you shall saile without the drie sand, & run about a seaboard of the forenamed Kroegh. Schelling-kroeg lieth in most N. W. men lie there within, sheltred for all winds, like as men doe lie at Coningborough in the Kettell. If so bee that you come from the northwards, and are bound into this Haven or Kroegh, you may run about by that drie sand in three fathom, when you come by the innermost point of that drie sand, there shooteth off a little taile of sand, but you may see it weel, and keepe your selfe from it: When you come to the east end of that sand, luffe up about it, untill you come into that Kroegh, and anckor there in two fathom and a foot, it is there very wide, you may make there a good boart, and turne it in to windwards. A southsouthwest and northnortheast moone maketh there the highest water, the farther you come to the northwards to Iutland, the lesse tide goeth, and the lesse it flouweth up and downe.

At the north end of the foresaid drie sand lieth the Doodenbergh, that is a short hommock of a sand-hill, which lieth alone. When you are somewhat of from it, then it lieth under the other land, that you can not see it, when you come from the southwards or the northwards you may see it. From the Doodenbergh unto that south end of the drie sand, it is all alongt a faire strand, and flat ground. For to ride under the drie sand, you may sound about it comming from the northwards, and get smooth water for a northwest wind, and also for westerly windes.

A little to the northwards of the Doodenbergh lieth the pointe called the Horne betwixt Zuyderzijt and Westerzijt making there a Horn of the land: to the southwards of it the Coast lieth eastsoutheast and westnorthwest towards the Grouwe-deepe: to the northwards of it north, and south towards Westerzijd is a village lying betwixt the blawenbergh and the Horne.

About this pointe or Horne runneth off a long banck a- Reefs-
bout twelve leagues westsouthwest into sea, called Reefs- horne.
horne, or as some do name it Devillhorne, which lieth at some places altogether drie, especially seven or eight leagues from the shoare, where it is not deeper then two fathome and a halfe, or three fathom a foote lesse. A shippe that sayleth upon it, men can but even see it from the land it is at the deepest by the land, to weete four fathome lacking a foot. He that cometh there from the northwards with a ship of a great draught, must take verie good heede, for it is upon, the northwest side of steepe, that men shal have one caste two and twentie, the next cast fiftene, and the third cast no more then three fathome.

When you fall with the land with westerzijdt or to the northwards of Ree shorne, you may sound alongt by the shoar in fixe or seven fathom, untill you come neare the foresayde Horne: you shall then also finde another showld Riffe, that runneth of from the land, called the Owle, which is also verie The Owl.
steepe on the north side: from the northwards you may not come nearer it, then in seven fathome. A little to the southwards of it begianeth Reefshorne to runne of from the shoare, it is there a narrowe banck, you shall not finde there lesse then three fathome, or three fathome lacking a foot water, at two or three cast, according as it shall blowe hard or soft, and that you shall make jour waie, and then you shall gette presentli againe five fathome, and found it about by that shoulde sand, whether you desire to be.

According to the opinien of some, Doggers-sand beginneth from this banck. When men sette sayle earlie in the morning out of Rinkoppers deepe, with a southwest waye, and a good northeast winde then they are aboute four of the clock in the afternoone yet in nine fathome: whereby it shoulde appeare, that Doggers Sand shoulde have his beginning at this banck.

For to knowne the land hereabouts: A boutte four leagues to the northwards of the foresayd Horne lieth a high hill a little from the strande, called the Blawenberh, going playn downe on both sides, which is somewhat blacker then the other,

other land, being grown with spyrie grasse, to the southwards of this Blawebergh lieth that fishers village Westerzijd betwixt that village and the Horne lieth one black hommock, and also a Gentlemans house, otherwise the land is altogether full of hommocks.

Rinkopper deepe.

To the northwards of the foresaid Blawenbergh lie three or four lowe white Sandhilles, and by the haven of Numen also two great white Sandhilles close one by the other. To the northwardes of these Sandhilles runneth in that Haven of Numen, the land lieth betwixt the Haven of Numen and the Doodenbergh, most south and north about seven leagues, all alongst a faire strand the best to beknowne of this coast, is the foresaid Blawebergh, and these two foresaid white Sandhilles.

Rinkopper deepe. For to saile into Rinkopperdeepe or the Haven of Numen runne alongst by the land of West-zyd, in fixe or seven fathome, untill that you come to the two foresaid great white Sandhilles, and then you shall see upon a lowe land two capes, upon each of them standeth a barrel: Bringe them one in the other, and then they shall stand north, or north and by east from you, saile in right with them, and you shall finde a buye, except it be laide somewhere els. Right before the haven of Numen lieth a Sandplate, named Gladde Iaep. For to saile into the souther channell, the leave that plate on the larboard side, and run in close by the southshoare or foot strand (where the foresayd white Sandhilles doe lye upon) right with the Capes, and there you can not doe amisse, but runne in boldly by it upon your lead, that is the verie surest waye of all to sayll in alongst by the strand, when men are care full of the lead.

Gladde Iaep.

Being past Gladde Iaep, runne then towards the north shoare, you may sayle about by it so close as you will, it is a lowe plaine poynte, al together cleane and verie steepe. When you are come within this poynt, you may anckor where you please. This channell lieth in most north and north and by east, untill you come within Gladde Iaep, and then somewhat more easterlie towards the foresayd poynt. In this channell goeth an indifferent strong tyde, because there lieth such a great Sound within. It floweth there a litle up and downe, no more then two foot and a halfe, with a common tyde. A southwest and northeast Moone maketh there the highest Water. Right to the northwardes of Gladde Iaep runneth in another channell, but there is no more but eight foot water.

Further within the Haven of Numen it is Pilots water, but shippes that are not of greate draught may well saile up, especially at a lowe water. The deepe runneth alongst by the strand of Numits, keeping alongst by it you can not doe amisse: so soone as you goe off from it, you shall be in daunger to sayle within the shares or tayles which lye off from the Wadt towards the land of Numit, therefore runne close alongst by the foresaid strand of Numit so long, untill that little church with a flatte steeple (about east from you against the high land of the Holme) come the south side of the high land: then you are within the tayles and sands that lye out, leave then the strande, and goe in northnortheast, and northeast and by north, untill that a rounde hommock come close to the southwardes, or right over a little blew church upon the high land of the Holme. Goe then in alongst northeast and by east untill that the foresayde little blew church commeth over a Gentlemans house, beneath in the lowe land, close to the water. Sayle then on north, and by litle and litle north and by east, untill you come before Rinkoppen, it is there broade, large and wide, and the right deep two fathome and two foote.

Rinkoppen and the havens mouth of Numen lye foure leagues a sunder one from the other.

To the northwardes of Rinkoppen goeth a little river into the land, upon which lye two little townes, seven or eight leagues in the land, the one named Hostebro and the other Huyfbuy.

A halfe league to the southwards of Boevenbergen goeth in yet another litle haven inwards out of the sea, named Trosfomone, there stand two mastes, you must keepe them one in the other, and runne so into it: there lieth a litle village within called Trosfomonde. From thence you may sayle over the Wadt to Rinkoppen.

This litle haven is not to be reckoned for a Haven because sometimes it is cast too, and sometimes there may goe in and out againe Boates or Crayers and small shippes.

From Rinkopper Deepe or the Haven of Numen to Boevenbergen the land lieth most north and south tenne leagues, there is all alongst betwixt them both a faire strand with wite sandhilles, growne wit spyrie grasse.

When you sayle alongst by it, you may see the blew double land of Rinkoppen, (called the Holmes) alongst over this land.

Betwixt Boevenbergen and the Reefhorne lie some bancks of seven, eight and nine fathom, and also some that are deeper.

Boevenbergh is a long smooth hill, having in the midst a high round hommock or hill, and upon that hill standeth a church with a steeple: when you come thwards to land with Boevenbergen: it sheweth it selfe in three hilles, the middlemost is the highest, upon which standeth the foresaid church, with a flat steeple: upon both sides of that hill stand also other churches, but they are not so high: you may see the land in thirteene and fourteene fathome, the ground is grosse red sand with some litle stones therein.

When Boevenbergen is eastnortheast from you, it sheweth it self in a long hill, with some dale in the midst on the north side, with a church, and also a church on the south side, and also another hill to the northwards of it.

From Boevenbergen to the Holmes the land lieth northnortheast nine or tenne leagues, betwixt them it falleth in with a Bight, it is blak land with hommocks, and sandhilles growen with spyrie grasse, here and there standeth a flat steeple in the land.

Aboute five leagues from land lieth a bancke of tenne fathome, but it lasteth not long before you get againe deepe water.

Betwixt Boevenbergen and the Holmes lieth the great Iuttish Riffe west into sea, running over it in twelve or thirteene fathome, then lieth the Naze from you, northwest and by north 24 leagues, running over it in seventeen or eightene fathome, you may see the land, on the north side it is grosse sand, on the south side stonie like as pease and beanes.

Westnorthwest from Boevenbergen about eight leagues it is sixteen fathom deep, grosse stonie sand ground: ten leagues from the land it is twentie fathome deep grosse stonie land, like to pease.

Southwest and by west from Boevenbergen about nine leagues, it is 25 fathom deep, redde and black sand ground that is the ground of Doggers sand.

The Holmes is a plain poynte, going downe steepe on the northeast side upon the middell of the hill standeth a square church without a steeple. When that highest of the land is southsoutheast from you, and that you can but even see the north end of, it then it is fifteen fathom deep, grosse roug sand, with some litle stones amongst it.

Two leagues northeast, or as some say, somewhat more easterly, off from the north poynte of the Holmes: to wit, betwixt the north poynte and the Holmes, and the easter poynte, lieth a stonebanck (in manner as the Trindell of Lesolde) upon which there is no more then twelve foot water, so that there remaineth about two thirde parts of the water betwixt that Stonebanck and the north poynt, and the other third parte betwixt the Easter poynte and the a foresaid Stonebanck: there have divers shippes bene lost upon it. The foresaid Easter poynte lieth about four leagues to the eastwards of the Holmes, and is also a high steepe poynt, as if were the Holmes. Right thwart of this easter poynte shoteth of a riffe almost a league off into sea, which you may sound about in seven fathom. Some say, that men may sayl through betwixt that riffe and the land. From the Holmes to Robsnot or Robbeknuyt the course is northeast nine leagues.

A litle to the west westwards of Robsnot in the bight towards the easter poynt, nearest to Robsnot stand five churches with flat steeples. There lye also two blew lands betwixt the easter poynt and Robsnot, in the high, you may see also a cloved hill or sand-hill before you come to Robsnot. It is the all alongst a flat strand.

To the eastwardes of the Holmes goeth in a litle river called Misdorp.

A litle to the westwards of that white cliffe or of Robsnot goeth in also a litle River, whereupon lieth a litle towne called Werlom.

Robsnot or Robbeknuyt is a high round hill, upon the toppe where of standeth a church with a sharpe steeple. The land falleth away to the eastwards from this poynt, with a great pight towards Hartshals.

Thwart of Robsnot is farre off flatte, fifteene fathom depth is almost three leagues from the shore.

There also thwart of Robsnot about foure leagues from the shore lieth a banck of nine fathome, lying alongst the shore.

Thwarte of Robsnot lieth also a rock about a league from the land.

From Robsnot to Hartshals it is northeast and by east four leagues,

leagues there standeth a flat steeple betwixt both nearest to Robbnor, there you may see the high land of Lackley, alongst over that high land.

Hartshals is a long smoot hill, which is at the east end somewhat steep.

Thwart of Hartshals lyeth a shoulde or stony ground, about an English mile the shoare, upon which (as men saile) there have beene shippes lost, but men doe seldome come neare it.

The Sca-
we. From Hartshals to the Scawe or Scagen the course is east-northeast eight leagues.

The land to the eastwards of Hartshals is altogether full of hommocks and sand-hilles, you may see the high land of Lackley also alongst over this land. Alongst these coastes men finde none such long plaine hilles, as are Boevenbergen the Holmes, Hartshals and Robbnor.

Somewhat within the point of the Scawe standeth a flat Church with a flat steeple, called Old Schangen, when that is southsoutheast from you, then there runneth of from the shoare, a litle spitte or shoulde, there you must edge somewhat of from the shoare, otherwise it is all alongst a steep strand betwixt Hartshals and the Scawe, but you may sounde about this litle sand in four and five fathom so neare as you will.

Upon the east end or outermost point of the Scawe standeth, a fire-beakon like a Cape too see too: when the Church is southwest and by west from you, then are the fire beakon and the steeple one in the other, and then you are right thwart of the riffe of the Scawe, which lieth of from the point east-northeast, and east and by north almost a league into sea.

He that commeth from the westwards, and will saile alongst by the land, about the Riffe, must especially by verie carefull in using the lead, he may take the founding of the shore so neare as he will accordingh as the winde shall be, in eight, seven, sixe, five, four, and also well in three fathome, without doing amisse, he neede not to feare: if he be but carefull in using his lead, with a southwest winde, he may sayl about in three or four fathome.

When the fire beakon commeth to the east side of the houses of the Scawe, then you come against the west side of the Riffe, when the fire beakon and the Church are one in the other, then you are on the east side of the Riffe.

When the fire beakon commeth about halfe wayes the houses, nearest the west side, then you are right upon the point of the Riffe, what depth that you have then you shall keep it stil, without finding it shoulde, wheter you saile alongst southeast or northwest.

He that commeth from the southwards, and is bound about the Scawe to the westwards may not sound the Riffe because the south side of it is deepe and needle to, it is not good to come neare to it then in twelve, thirteen, or fourteen fathom, especially by night or darke wether.

For to knowe by certaine markes, when you are cleare of this Riffe, as well over the one side as the other, then marke, comming from the westwards, when the old church and the firebeakon are one in the other, then you come upon the west-side of the Riffe: comming from the southwardes or the eastwardes, when the old Church commeth in the south end of the village, then you come upon the south side of the Riffe. When the steeple and fire beakon are southwest & by west from you, then they are one in the other, and then you are thwart of that Riffe. When the steeple is southwest and southwest and by south from you, then you are without, or to the westwardes of that Riffe: when the steeple or firebeakon is west-southwest and by south from you, then you are within the Riffe. This you may set by night, by the compasse, and so may perceive, wether you be within or without that riffe, when the Firemaker doth fire well. You may anchor on both sides of the Riffe in seven or eight fathom, and have roome enough to set saele. Some also say, that men may runne through betwixt the riffe and the land (If neede require) in two fathom and a half.

Between the Scawe and Maelstrand or Norwaye it is all soft ground, the neare to Norwaye the deeper water. When men come out of the Sound, & are in the farewaie, and can gettet no ground in eighteen, twentie, & two and twentie fathom, that is a signe that they are about the riffe of the Scawe.

When you come about the Scawe from the westwardes, and are bound to the Sound or the Belt you must take, an especiall care of the tyde that commeth out of the Belt which falleth commonly out of the Belt towards Norwaye, especially when the winde hath blown a while east or northeast, it can carrie a shipp by night or darke wether under Norwaye, before you should thinke of it, it did happen in the yeare 1605, the three and twentieth of may that a shipp comming thwart of the riffe of the Scawe, so that the riffe did lye southwest from her, did

driven with calmes in eight hoires, untill shee came within three leagues neare to the land of northeast, about Harmenshooft five leagues to the westwards of Maelstrand, so great and strong current there did shoote alongst by the riffe towards the northeast, al through it doth seldome happen, that the tyde doth run there so strong out, yet neverthelesse it behooveth men to be verie carefull, to consider there of, and to reckon there upon.

From the Scawe, to Seabuy the course is south and by west sixe leagues, there it is upon the road four and five fathom deep. Betwixt the Scawe and Seabuy lye the small Helmes four leagues from the Scawe, and two leagues to the northwards of Seabuy. When you will saile into the Belt, you must leave then on the starboardside, going on still south and by west untill thwart of seabuy, you may also saile through betwixt the Helmes and the main land unto seabuy, if you will, there is at the shouldest betwixt them 3 fathom water, but about a seaboard the Helmes, betwixt the Helmes and the north end of Lefou, it is foure leagues broad, and in the channel ten fathom deep soft ground.

The lying of the Helmes, and how men shal come to anchor there, and also of all depts, shoulds and dwale grounds, betwixt the Helmes, the Scawe, and Lefou, together with the description of the lland Lefou and the riffes that lye outthere about it is described before.

Betwixt Lefou and Seabuy lye many dwale grounds, which are very uneven of three, foure, five and sixe fathom the like uneven & shoulde grounds lie also within or to the southwards of seabuy, of foure, five and sixe fathom, but the right channell through betwixt the dwale grounds of Lefou, and the shoulds of seabuy is seven and eight fathom deep.

To the southwards of the small Helms and seabuy, neerer to the maine land then Lefou, lye also some uneven dwale grounds, upon which there is no more water then 10, 11, and at some places 12 foot. Hee that draweth but 8 or nine foot need not feare of them.

From seabuy to Aelburgher deepe, the course is south and by west seven leagues, upon the north side of the haven standeth a flat steeple called Hals, in the havens mouth lieth a bay, and upon the southland stand two Capes, which you must bring one in the other, by them you shall finde the buye, the channell lieth in first west and by south, about a cables length, then you must run up northwest and west right unto Hals, and run in by the north shore, untill thwart of Hals from the south point, of the land shooteth off a flat which you must avoid, being thwart of Hals you must goe southwest and by west unto the bight, and in the crooked channel you must shun the north shore somewhat and then againe northwest and by west alongst by the north side unto the second crooked, and then south-south-west and afterwards west-south-west unto the town, in the comming in by the buye, it is two fathome.

But for to sayle in there, it is best to take a Pilot. By the south shore goeth in also a litle deepe of six and seven foot. The Towne Aelburgh lyeth up in the land foure leagues within the river. Also there lieth alongst this coast to the westwards some bancks, there you must shunne the land somewhat.

When you sail from the Helmes to Stevenshead, through betwixt the dwale grounds & the flat of Seabuy, you shal meet with a shoulde ground about half wayes betwixt Stevens-head and Seabuy or 5, 6 and 7 fathom. This shoulde is called the Swetering, & lieth about 3 leag. eastwards from Aelburgh deep, the channel there betwixt them is about 10 or 12 fathom deep.

From Aelburgh deep to Haselin, the course is southeast and by east about 20 leagues.

From Aelburgh deep to Stevenshead the course is southeast and by south about nine leagues. There betwixt them the land lyeth in a great Bay, where in lye the two litle townes Mariacker & Randerfen: Mariacker lyeth from Aelburgh deep south and south and by west 4 leagues, and from Stevenshead, five leagues. Betwixt Mariacker and Stevenshead lyeth the River of Randerfen, which runneth up crooked farre into the land, unto the litle town Schandelburgh.

From Stevenshead to Haselin the course is east-southeast 13 leagues. Haselyn is on the outer side full of shoulds, riffes, and grounds. A larger description of Haselyn and Anout as also of all the foule grounds and shoulds, lying thereabouts, you shall finde in the first Demonstration of this book.

A litle to the southwardes of Stevenshead lieth a litle town called Oruntbuy, there lye the Chalck-grounds right before the river of Grimfoud in a bay a litle about the poynt off Stevenshead: that is a sand two or three foot water, but not

For to saile into Aelburgher deep.

The Swetering.

Stevens-head.

Mariacker

Randerfen

Haselin

Oruntbuy Chalck-grounds.

M

but not

but not far of it, is ten fathom deepe you may sound them in foure fathom. You may saile up in to Grimfoud, unto Grimftee, that is a lading place or Huies.

Greathelm From Stevenshead unto the great Helme the course is southsouthwest about six leagues. The land lieth from Stevenshead unto the point of Ebeltud southsouthwest seven or eight leagues. Ebeltud is a little Towne lying within the land thwart of the great Helme. Betwixt the great Helme and Iutland it is six and seven fathom deepe. Close by Stevenshead, and the point of Ebeltud is eight nine, and also tenne fathom deepe. The gret Helme hath two Riffes, one upon the northeast side, and the other upon the southwest side.

From Stevenshead to Siero the course is southsoutheast 8 leagues, to the northwards of Syero lyeth a ground loose from the land, divided into two Riffes, which men must avoid. These two Riffes lye at some places above water.

From the southeast poynt of Siero lieth of a riffe towards Rusnes, here you may ankor behind it.

Wero. From the great Helme unto the Iland Wero, the course is northnorthwest, and southsoutheast foure leagues distant, there it is 4 and five fathom deep. From Wero there runneth of a should unto Kyholm, and about Kyholme: and also about the little Iland Sampso, it is also full of should ground, which run off unto the great Iland Sampso.

Kyholme Sampso. From the great Helm unto the Iland Sampso it is southwest and northeast foure or five leagues.

Sampso. From the north end of the Iland Sampso there shooteth off a litle riffe north into the sea, you must sound close about by it for to come into the road of Sampso, when you will ankor there. It is there in the road tenne fathom deepe, and you shall be there under the Swan-ground sheltred for all windes.

Aerhuyfen From the south end of Ebeltud to Aerhuyfen the course is west and by north, and w. northwest five leagues. It is there all should water of 2 and 3 fathom deep. He that will ankor in the road before Aerhuyfen, let him bring the great steeple in the midst betwixt the two other sharp steeples, there is the best ground, and good road in three, foure, & five fathom, so should as you will. To the southwards of Aerhuyfen goeth in the Wederfoud betwixt Iutland and Sampso: hee that will saile in there, must bee well acquainted, for it is there all full of riffes & shoulds. You may not also use that fareway by night, by reason of all the sands and shoulds, and also by day you must be very carefull and circumspect in looking out, and not spare your lead, but you may ankor & have road there every where.

For to sayl through the wedersound. When you will saile through the Wederfoud, comming off from the great Helme or Ebeltud, you must leave the Iland Tuns and the Swangrounds on the larboard side, running all alongst by the Iutish coast in 2, or 3 fathom, untill past Horsens, or the Iland Endelau, which you may not saile to, nor come neare from the westwards, by reason of all the grounds which lie before it on the west side. It is a narrow channel betwixt Endelann, and the main land, lying from the Wederfoud through the Swan-grounds south, it is on both sides should, and but a creek for to saile through.

Swanne-grounds. When you come off from the Melfersound and will saile through the Wederfoud, it is best to runne alongst by the Iutish side untill thwart of the river of Horsens, then you must edge somewhat of there from the land, and saile right with the Iland Tons, and so you runne through betwixt the Norther and Souther grounds, leaving the Ilands Tons on the starboard side. When you are then past Tons, you shall runne out close by the north point of Sampso, towards the land of Ebeltud, it is altogether one course from Horsens to Tons, and forth to Sampso, and the point of Ebeltud, too wit, Northeast and southeast eight or nine leagues.

Melfersound. From Horsens, or that Iland Endelau unto the Melfersound, the course is southsouthwest 6, or 7, leagues. The Melfersound is a deep found of 20, and 15 fathom, very crooked to come into, it goeth in betwixt Fuynen and Iutland, which are both high lands. From the Iland Ebelo unto Melfersound the course is S. W. and southwest by south five great leagues.

Ebelo. From the road of Sampso to Ebelo the course is s. f. w. and southwest & by south 5 leagues. From the south end of Sampso to Ebelo the course is southwest and by west foure leagues.

Roems. From Sampso to Roems the course is southeast and n. w. 5 leagues. The n. west coast of Fuynen lieth southw. and by west eight leagues. The little Iland Ebelo lieth of a league from the same, right before Bouwens, but you cannot saile through betwixt the Iland and Fuynen. To the southwards of the Iland lieth a great rocke under water, betwixt this rock & the Iland is the road before Bouwens in eight and nine fathom.

Betwixt Syro and Wero lieth a dangerous riffe, long and broad lying further then halfe way to Siro. When you will run

through betwixt the two foresaid Ilands a weather of Ruffes nesse, you must leave at least the two third parts of the water on the side of Wero, & goe in southsouthwest towards Roems, which is nine leagues distant.

The foresaid riffe is called Haters riffe, is on the east side very hard and stony, hee that commeth from Balt sack, he shall run close to the Iland Wero, for to avoid that riffe, the channel betwixt the riffe and Wero is not very broad, and 3 fathom or three fathom and a halfe deep. He that commeth from Roems or Rusnes, and will saile through Wero found, let him bring the great Helm to the east side of Wero, and keep them to standing sailing on so right with them, he shall (to doing) take no hurt of Haters riffe. Betwixt Syro and Haters riffe and somewhat more southwardly, the ground is very uneven of 5, 6, 7, 8, and nine fathom. On the southside of Haters riffe it is good anckoring for northerly winds in 6, and 7 fathom.

Rusnes and Syre lye northnortheast and southsouthwest about foure leagues asunder.

From the point of Rusnes runneth of a little riffe to seawards but to the eastwards of it betwixt Rusnes and Hafelyn, lyeth of a riffe at least two leagues into sea, which lieth dry at the ende, and by it, it is very steep, close, alongst by the end it is eight fathom deep.

From Rusnes to Spro it is south and by east eight or nine league. Betwixt Rusnes and Spro lyeth Callenburgh, which is also a lade place, and about 2 leagues to the southwards of Callenburgh lyeth a flat alongst the coast about a league from the shore of 5 fathom depth.

From the east end of Spro runneth of a litle riffe or ledge of rocks, and over against it commeth also a flat shooting off from the land, betwixt them both it is 4 and 5 fathom deep, but behinde or thwart of Spro lieth Caffeur, a faire Have, where men doe lie at the Kay, and let their goods be carried into the ships.

From Spro to Langeland the course is southeast, & by south foure leagues distant. He that commeth alongst to the eastwards of Wero, through the channel betwixt Wero and Haters riffe, and will saile to Roems, let him go on due south and by east, and then he shall runne alongst about an English mile to the eastwards of the Bolt sack, and fall with the land a litle to the eastwards of Roems: likewise hee that goeth from Roems, or a litle to the eastwards of it, on north and by west, hee shall fall betwixt Wero and Haters riffe right in the fareway. Betwixt Roems and Fuynen you may run thorow in two fathom, but with great ships you can not goe through there.

From the north end of Fuynen shooteth of a litle riffe about an English mile into sea. About a league east and by north from Roems lieth a should of 3, 4, and five fathom, which is steep, and shouldeth up so suddenly, th at a man, not knowing of it, and findeth it so by the lead, should bee affrighted at it. To the southwards of Roems, in the land of Fuynen lieth a little towne, for to lade, called Cartemonde. The Haven goeth in from the eastwards, and it is should on the west side, there lie de. no buyes in the Havens mouth, there is no more water then 5, six, or sometimes seven foot.

From Roems to Spro, or Knuytshead, the course is south and by east, and southsoutheast 5 leagues. Betwixt Spro and Knuytshead it is 12, and 13 fathom deep. But betwixt Roems and Spro, it is 10, and 11, fathom deep.

Even about to the southwards of the point of Knuytshead in Buyen lieth the haven of Nyburgh, when you are about the point you runne right up to the towne, about northwest, a league there it is six and seven fathom deep. Men doe lie there with ships to the Kay, and let their goods bee carried in what they will.

From Knuytshead to Langeland the course is southeast 4 leagues, and then you leave Spro lying on the starboard side. From the southwest end of Spro shooteth of a litle riffe which you must avoid. At the north end of Langeland lye the little Ilands of the Frissell, which are round about very foule. From Knuytshead to the Iland Tassing the course is south foure leagues and then you leave the Frissell lying on the larboard side, and run through betwixt the Frissell and Fuynen. If you be bound to Swineburgh, then go from the Frissell to the southeast end of Fuynen, on southsouthwest, and you shall meet a little Iland which you may runne about on both sides of it. Through betwixt Tassing and that little Iland, or you may run alongst by the land of Fuynen, untill that you come to the little Towne of Swineburgh, which lieth over against the Iland of Tassing. Over against the point of Fuynen lyeth a little Iland called Olms, then you must goe up to the westwards. You may also runne about on the other side off Tassing, and leave the Iland Arr with the foule grounds (which lie betwixt Arr and the south-east

East end of Fuynen) on the larboard side of you, it is not deeper upon these grounds then 6 foot. Now as that you shal come by the litle Iland Olms, or by the southeast point of Fuynen, then you must (as before is said) goe up to the westwards about the point of Fuyne. towards Woburgh. Upon the south side of these foresaid grounds goeth also a Deepe through, west, and west and by south through betwixt the grounds and the Iland Arr: upon this Iland Arr lyeth a little Towne called Koping. This foule ground is three leagues long, and that Iland Arr is also three leagues long, they lie both of them east and west, and the Munk Iland lieth at the end of these grounds before Woburgh in Fuynen, which hath two riffes, the one shooteth off from the southeast end east into sea the other from the north point northeast into the sea. When you saile through to the northwards of these grounds, to wit, betwixt Fuynen and these grounds, towards Woburgh, you shall also meet with the foresaid Munk, with another litle Iland or two more, leave them lying on the larboard side, and run all along by the land of Fuynen, about west and west and by north unto the point of Askens, which is about five leagues distant from the southeast point.

From the east point of Askens unto the litle Ilands Toreu and Areu, the course is west and by north, and westnorthwest two leagues, these two litle Ilands lye one over against the other, the one on the side of Iutland, and the other on the side of Fuynen men runne through there betwixt two riffes which run off one against the other, it is there 4 and 5 fathom deep. Too the northwards of westwards of Areu lieth the Sound of Haddersleu, which lieth in about west and by south, upon it lieth the towne Haddersleu two leagues within the land.

From Areu or Foreu to Melfersound the course is n. n. w. 5 leagues, which you must run into from the southwards first westward; unto the sound of Coldingen, being a broad Sound, which goeth a league into the land, if you wil goe through the Melfersound, you must leave it on the larboard side, and goe up to the eastwards unto the towne of Melfer, where you come then againe into a crooked channell. The Melfersound goeth out to the northwards with a very crooked channell, and you come out a gaine upon the broad water to the northwards of Fuynen, as is before said. You may also sail off from Areu into the sound of Aelfsem alongst southsouthwest unto Apenrade, and then about behind the Iland of Aelfsem untill you come into the sound of Flesburg.

The Melfersound and the litle Iland Areu lye southsouth east and northnorthwest one from the other.

To saile out of the Ailsen sound from Areu or the Melfersound, then go from Areu or Toreu unto the Roen east and by south three leagues, and then through betwixt the Iland and Fuynen that is alongst to the northwards of Roen, for you can not goe about to the southwards of it. The Roen is a bad and should riffe shooting of from Aelfseu, whereunto it is fast, the outh end of it lieth dry like Anoutriffe. From the Roen to Arr or Koping the course is southeast and by east 5 leagues.

From the southeast end of Aelft shooteth off a great riffe towards Arr called the Poles riffe: you must run through betwixt Arr and that riffe, leaving two third parts of the water on the Aelfen side, and one third part towards Arr, & runne on so with the fourth end of Langeland, untill that you come against Cope.

From Arr to the south end of Langeland, the course is southeast and by east, and e. s. e. foure leagues. And from the Poles riffe to the south end off Langeland, the course is west and by south six leagues. You may run through betwixt Langeland and Arr the Northwards and come out againe into the Belt by Nyburgh: from the south end of Langeland to Tassing, it is north and by west 6 leagues) you may sail about Tassing on both sides, and leave Arr and the foule grounds lying on the one side of you. Upon these grounds it is but six foot deep.

You may also saile through betwixt the foresaid grounds and Fuynen into the sound of Aelfsen, unto the litle Ilands of Areu and Toreu, as hath been said here before.

From the litle Iland Areu to Apenrade the course is southsouthwest five leagues. The sound of Apenrade is a broad open sound, upon which lieth the foresaid towne of Apenrade.

From the river of Apenrade unto the crooked channell off Sonderburgh, which goeth in betwixt the Iland Aelfsen and the maine land, the course is east 3 leagues, there you may saile through about behinde the Iland of Aelfsen to Sonderburgh, and then forth into the sound of Flensburgh. It is very narrow and crooked betwixt the Iland and the maine land, but when you are come through the narrow and crooked channell into the sound of Flensburg, there it is broader and larger.

The sound of Flensburgh goeth in betwixt Sonderburgh & Holsterland, being a broad sound. He that will saile in there,

must take very good heed of the Holsterside, when you begin to come betwixt the two lands, and run in alongst by the land off Aelft, for from Nubell or Holsterland lye off the Chalck grounds halfe wayes the deep. This sound lieth in west and by south untill that you come before the river. There lieth in the rivers mouth a little Iland on the starboard side, you must run in to the eastwards of it, and goe in west and by south and west, untill you come within the crooked channell off the River or Sound, and then you must goe up againe southwest then you shall see the towne of Flensburgh lye before you.

Of the depths about these places, and in what depths men may see the land.

In the Ripe, Eyder and Hever, a south and north moone maketh the highest water, the south commeth there out of the northwest, and the ebbe out off the southeast, and so run over the north grounds.

In the deep of Lift or Silt, a south and north moone maketh the highest water, the flood commeth there out of the northwest, and falleth very little alongst the land, and the ebbe to the contrary.

In Knuyts deep, a southsouthwest and northnortheast moone maketh the highest water. The flood commeth here also out of the northwest and falleth but great quarter tyde alongst the land, and the ebbe to the contrary.

In the Haven of Zuyderzigt, the Grove deep, the Schellingkroegh a southsouthwest and northnortheast moone maketh the highest water, the flood commeth there also out of the northwest and falleth over the Reefs home towards the Iutish Iland, and the ebbe againe to the contrary, of from the land in the north Sea.

Off the grounds and depths.

The grounds of the Hever & the banckes of the Smal deep without the strand and Eyderstee, lye at least two leagues without the coast of the land.

Betwixt Holyland and Ameren or Strand it is tenne or eleven fathom deepe, in that depth you may see both the lands, if you climbe up in the shroudes. Strand is to bee knowne by the steeple of Pielworme, standing upon the fourth end of the land: Upon the Iland strand more churches and steeples, but none so good to be knowne as Pielworme.

Ameren is a league and a halfe long, & hath all alongst low sandhills growne with spiry grasse.

The Iland Silt you may see in ten fathom: upon this Iland (nearest to the north end) lieth a high steepe red cliffe, on both sides going sloping downe; upon the south side of the side of the cliffe standeth a flath Church, with a low steeple, and to the eastwards of it another Church, with a high thick steeple called Heydom. The north end of the Iland is called Lift, and the south end Voortrap.

Courses and Distances.

From the Eyder to Hever the land lieth northnorthwest and s. s. e.	5 leagues
From the Hever, or the south end of Strand to the south end of Ameren northnorthwest about	5 leagues
Two leagues north from Ameren lieth Silt which is about 5 leagues long, and lyeth south and by east, and north and by west.	
From the north end of Silt, called Lift, unto the south end of Rim or Rem, it is northeast and s. w. one great league, Rem is three leagues long, and lyeth most south and north.	
From the north end of Rem, to the south end of Manu, it is northeast and s. w. a league and a halfe, you can hardly get sight of it by reason of the grounds, and great showlds, which lye thwart of it to seawards.	
Manu and Phanu lye about two leagues one from the other, Manu is almost a league long, and Phanu about 4 leag. long, and lieth from Phanu Knuyter to Knuytes-deepe, s. s. e. and n. n. w. This Iland hath also a faire strand, but the north end towards Grouwedeepe is very flat.	
From Phanu to Dodebergh it is about 4 leagues, betwixt them lye the havens of the Grouwedeepe and Schelling-kroegh.	
From Holyland to the Eyder east and by north, and west and by s.	7 leagues
From Holyland to the outermost buy in the Hever, n. e. and s. w.	8 leagues
You may lye by the outermost buye in the Hever, and see Holyland with cleare sight.	
From Holyland to Ameren or Smalle-deepe, n. n. e. somewhat easterly, and s. s. w. somewhat westerly	10 leagues
From Holyland to the deepe of Silt or lift, north and by east	19 leagues
From Holyland to Knuyts-deep or Rypet-deepe, north and north and by east	25 leagues
From Holyland to the Horne or the Dodebergh north and by s.	32 leagues
From Knuyts deep or the Iland Phanu to the Flye, s. w. and by s.	50 leagues
From the Iland Silt to the Fly northeast and southwest	46 leagues
From the Dodebergh or the Horne, to the haven or Numen or Rinkoper-deepe, north and by west	7 or 8 leagues
From the Rinkoper deep, or the haven of Numen to boevenberghen north and by west about	10 leagues
From the Dodebergh to boevenbergen, the land of Iutland lyeth north and by west, and south and by east	17 or 18 leagues
From Boevenbergen to the Holmes northnortheast	9 leagues
From the Holmes to Robsnot or Robbe-knuyt northeast	9 leagues
From Robsnot to Hartshals northeast and by east	4 leagues
From Hartshals to the Scawe or Schagen eastnortheast	8 leagues
From Rinkoper or Numer-deep to the Fly southsouthwest or a little more westerly about	38 leagues
From boevenbergen alongst Iutland, without the grounds unto the Elve or the outermost buy south and by east about	50 leagues
From boevenberghen to Holyland, south and by east somewhat southerly about	45 leagues
From boevenbergen to the Flye or borneriffe s. southwest about	69 leagues
From boevenbergen to the north Forland s. w. and by s.	118 or 120 leagues
From boevenbergen to the holmes before Yarmouth southwest	93 leagues
From boevenbergen to Flambrough-head westsouthwest	100 leagues
From boevenbergen to Scarbrouge w. s. w. somewhat westerly	100 leagues
From boevenbergen to the River of New-castle or Tynemouth west and by south about	106 leagues
From boevenbergen to boecknes west and by north about	106 leagues
From boevenbergen to the Naze northwest and by north	24 leagues
From the Riffe in sixteene fathom to the Fly s. and by w.	62 or 64 leagues
From the Riffe in eighteen fathom to the strait betwixt Callice and Dover southsouthwest about	120 leagues
From the holmes to the Naze northwest about	19 or 20 leagues
From the holmes to Fleckery northwest and by north	9 leagues
From the Holmes to Mardow north	24 leagues
From the Holms to Longsound north and by east	35 or 36 leagues
From the Holmes to Ferderoer northnortheast	40 leagues
From the Scawe to Tynemouth westsouthwest	136 leagues

but not far of it, is ten fathom deepe you may found them in foure fathom. You may saile up in to Grimfoud, unto Grimftee, that is a lading place or Huies.

Greathelm From Stevenshead unto the great Helme the course is southsouthwest about six leagues. The land lieth from Stevenshead unto the point of Ebeltud southsouthwest seven or eight leagues. Ebeltud is a little Towne lying within the land thwart of the great Helme. Betwixt the great Helme and Iutland it is six and seven fathom deepe. Close by Stevenhead, and the point of Ebeltud is eight nine, and also tenne fathom deepe. The great Helme hath two Riffes, one upon the northeast side, and the other upon the southwest side.

From Stevenshead to Siero the course is southsoutheast 8 leagues, to the northwards of Syero lyeth a ground loose from the land, divided into two Riffes, which men must avoid. These two Riffes lye at some places above water.

From the southeast poynt of Siero lieth of a riffe towards Rufnes, here you may ankor behind it.

Wero. From the great Helme unto the Iland Wero, the course is northnorthwest, and southsoutheast foure leagues distant, there it is 4 and five fathom deep. From Wero there runneth of a should unto Kyholm, and about Kyholm: and also about the little Iland Sampso, it is also full of should gronnds, which run off unto the great Iland Sampso.

**Kyholm
Sampso.**

From the great Helm unto the Iland Sampso it is southwest and northeast foure or five leagues.

Samps.

From the north end of the Iland Sampso there shooteth off a litle riffe north into the sea, you must found close about by it for to come into the road of Sampso, when you will ankor there. It is there in the road tenne fathom deepe, and you shall be there under the Swan-gronnds sheltered for all windes.

Aerhuyfen

From the south end of Ebeltud to Aerhuyfen the course is west and by north, and w. northwest five leagues. It is there all should water of 2 and 3 fathom deep. He that will ankor in the road before Aerhuyfen, let him bring the great steeple in the midst betwixt the two other sharp steeples, there is the best ground, and good road in three, foure, & five fathom, so should as you will. To the southwards of Aerhuyfen goeth in the Wederfoud betwixt Iutland and Sampso: hee that will sayle in there, must bee well acquainted, for it is there all full of riffes & shoulds. You may not also use that fareway by night, by reason of all the sands and shoulds, and also by day you must be very carefull and circumspect in looking out, and not spare your lead, but you may ankor & have road there every where.

**weder-
foud.**

**For to sayl
through
the weder-
foud.**

When you will saile through the Wederfoud, comming off from the great Helme or Ebeltud, you must leave the Iland Tuns and the Swangrounds on the larboard side, running all alongst by the Iuttish coast in 2, or 3 fathom, untill past Horsens, or the Iland Endelau, which you may not faile to, nor come neare from the westwards, by reason of all the grounds which lie before it on the west side. It is a narrow channel betwixt Endelann, and the main land, lying from the Wederfoud through the Swan-grounds south, it is on both sides should, and but a creek for to saile through.

**Swanne-
gronnds.**

When you come off from the Melverfoud and will sayle through the Wederfoud, it is best to runne alongst by the Iuttish side untill thwart of the river of Horsens, then you must edge somewhat of there from the land, and saile right with the Iland Tons, and so you runne through betwixt the Norther and Souther grounds, leaving the Ilands Tons on the starboard side. When you are then past Tons, you shall runne out close by the north point of Sampso, towards the land of Ebeltud, it is altogether one course from Horsens to Tons, and forth to Sampso, and the point of Ebeltud, too wit, Northeast and southeast eight or nine leagues.

**Melver-
foud.**

From Horsens, or that Iland Endelau unto the Melverfoud, the course is southsouthwest 6, or 7, leagues. The Melverfoud is a deep foud of 20, and 15 fathom, very crooked to come into, it goeth in betwixt Fuynen and Iutland, which are both high lands. From the Iland Ebeltud unto Melverfoud the course is S. W. and southwest by south five great leagues.

Ebelo.

From the road of Sampso to Ebelo the course is s. f. w. and southwest & by south 5 leagues. From the south end of Sampso to Ebelo the course is southwest and by west foure leagues.

Roems.

From Sampso to Roems the course is southeast and n. w. 5 leagues. The n. west coast of Fuynen lieth southw. and by west eight leagues. The little Iland Ebelo lieth of a league from the same, right before Bowens, but you can not saile through betwixt the Iland and Fuynen. To the southwards of the Iland lieth a great rocke under water, betwixt this rock & the Iland is the road before Bowens in eight and nine fathom.

Betwixt Syro and Wero lieth a dangerous riffe, long and broad lying further then halfe way to Siro. When you will run

through betwixt the two foresaid Ilands a weather of Ruffes nesse, you must leave at least the two third parts of the water on the side of Wero, & goe in southsouthwest towards Roems, which is nine leagues distant.

The foresaid riffe is called Haters riffe, is on the east side very hard and stony, hee that commeth from Baltfack, he shall run close to the Iland Wero, for to avoid that riffe, the channel betwixt the riffe and Wero is not very broad, and 3 fathom or three fathom and a halfe deep. He that commeth from Roems or Rufnes, and will saile through Wero foud, let him bring the great Helm to the east side of Wero, and keep them so standing failing on so right with them, he shall (so doing) take no hurt of Haters riffe. Betwixt Syro and Haters riffe and somewhat more southwardly, the ground is very uneven of 5, 6, 7, 8, and nine fathom. On the southside of Haters riffe it is good ankorling for northerly winds in 6, and 7 fathom.

Rufnes and Syre lye northnortheast and southsouthwest about foure leagues asunder.

From the point of Rufnes runneth of a little riffe to seawards but to the eastwards of it betwixt Rufnes and Hafelyn, lyeth of a riffe at least two leagues into sea, which lieth dry at the ende, and by it, it is very steep, close, alongst by the end it is eight fathom deep.

From Rufnes to Spro it is south and by east eight or nine league. Betwixt Rufnes and Spro lyeth Callenburgh, which is also a lade place, and about 2 leagues to the southwards of Callenburgh lyeth a flat alongst the coast about a league from the shore of 5 fathom depth.

From the east end of Spro runneth of a litle riffe or ledge of rocks, and over against it commeth also a flat shooting off from the land, betwixt them both it is 4 and 5 fathom deep, but behind or thwart of Spro lieth Casser, a faire Have, where men doe lie at the Kay, and let their goods be carried into the ships.

From Spro to Langeland the course is southeast, & by south foure leagues distant. He that commeth alongst to the eastwards of Wero, through the channel betwixt Wero and Haters riffe, and will saile to Roems, let him go on due south and by east, and then he shall runne alongst about an English mile to the eastwards of the Boltfack, and fall with the land a litle to the eastwards of Roems: likewise hee that goeth from Roems, or a litle to the eastwards of it, on north and by west, hee shall fall betwixt Wero and Haters riffe right in the fareway. Betwixt Roems and Fuynen you may run thorow in two fathom, but with great ships you can not goe through there.

From the north end of Fuynen shooteth of a litle riffe about an English mile into sea. About a league east and by north from Roems lieth a should of 3, 4, and five fathom, which is steep, and shouldeth up so suddenly, th at a man, not knowing of it, and findeth it so by the lead, should bee affrighted at it. To the southwards of Roems, in the land of Fuynen lieth a little town, for to lade, called Cartemonde. The Haven goeth in from the eastwards, and it is should on the west side, there lie no buyes in the Havens mouth, there is no more water then 5, six, or sometimes seven foot.

From Roems to Spro, or Knuytshead, the course is south and by east, and southsoutheast 5 leagues. Betwixt Spro and Knuytshead it is 12, and 13 fathom deep. But betwixt Roems and Spro, it is 10, and 11, fathom deep.

Even about to the southwards of the point of Knuytshead in Buyen lieth the haven of Nyburgh, when you are about the point you runne right up to the town, about northwest, a league there it is six and seven fathom deep. Men doe lie there with ships to the Kay, and let their goods bee carried in what they will.

From Knuytshead to Langeland the course is southeast 4 leagues, and then you leave Spro lying on the starboard side. From the southwest end of Spro shooteth of a litle riffe which you must avoid. At the north end of Langeland lye the little Ilands of the Frissell, which are round about very foule. From Knuytshead to the Iland Tassing the course is south foure leagues and then you leave the Frissell lying on the larboard side, and run through betwixt the Frissell and Fuynen. If you be bound to Swineburgh, then go from the Frissell to the southeast end of Fuynen, on southsouthwest, and you shall meet a little Iland which you may runne about on both sides of it. Through betwixt Tassing and that little Iland, or you may run alongst by the land of Fuynen, untill that you come to the little Towne of Swineburgh, which lieth over against the Iland of Tassing. Over against the point of Fuynen lyeth a little Iland called Olms, then you must goe up to the westwards. You may also runne about on the other side off Tassing, and leave the Iland Arr with the foule grounds (which lie betwixt Arr and the southeast

East end of Fuynen) on the larboard side of you, it is not deeper upon these grounds then 6 foot. Now as that you shal come by the litle Iland Olms, or by the southeast point of Fuynen, then you must (as before is said) goe up to the westwards about the point of Fuynea towards Woburgh. Upon the south side of these foresaid grounds goeth also a Deepe through, west, and west and by south through betwixt the grounds and the Iland Arr: upon this Iland Arr lyeth a little Towne called Koping. This foule ground is three leagues long, and that Iland Arr is also three leagues long, they lie both of them east and west, and the Munk Iland lieth at the end of these grounds before Woburgh in Fuynen, which hath two riffes, the one shooteth off from the southeast end east into sea the other from the north point northeast into the sea. When you saile through to the northwards of these grounds, to wit, betwixt Fuynen and these grounds, towards Woburgh, you shall also meet with the foresaid Munk, with another litle Iland or two more, leave them lying on the larboard side, and run all along by the land of Fuynen, about west and west and by north unto the point of Askens, which is about five leagues distant from the southeast point.

From the east point of Askens unto the litle Ilands Toreu and Areu, the course is west and by north, and westnorthwest two leagues, these two litle Ilands lye one over against the other, the one on the side of Iutland, and the other on the side of Fuynen men runne through there betwixt two riffes which run off one against the other, it is there 4 and 5 fathom deep. Too the northwards of westwards of Areu lieth the Sound of Hadderfleu, which lieth in about west and by south, upon it lieth the towne Hadderfleu two leagues within the land.

From Areu or Foreu to Melferound the course is n. n. w. 7 leagues, which you must run into from the southwards first westward; unto the sound of Coldingen, being a broad Sound, which goeth a league into the land, if you wil goe through the Melferound, you must leave it on the larboard side, and goe up to the eastwards unto the towne of Melfer, where you come then againe into a crooked channell. The Melferound goeth out to the northwards with a very crooked channell, and you come out a gaine upon the broad water to the northwards of Fuynen, as is before said. You may also sail off from Areu into the sound of Aelfem alongst southsouthwest unto Apenrade, and then about behind the Iland of Aelfems untill you come into the sound of Flesburg.

The Melferound and the litle Iland Areu lye southsouth east and northnorthwest one from the other.

To saile out of the Ailfen sound from Areu or the Melferound, then go from Areu or Toreu unto the Roen east and by south three leagues, and then through betwixt the Iland and Fuynen that is alongst to the northwards of Roen, for you can not goe about to the southwards of it. The Roen is a bad and should riffe shooting of from Aelfeu, whereunto it is fast, the outh end of it lieth dry like Anoutriffe. From the Roen to Arr or Koping the course is southeast and by east 5 leagues.

From the southeast end of Aelft shooteth off a great riffe towards Arr called the Poles riffe: you must run through betwixt Arr and that riffe, leaving two third parts of the water on the Aelfen side, and one third part towards Arr, & runne on so with the south end of Langeland, until that you come against Cope.

From Arr to the south end of Langeland, the course is south-east and by east, and e. s. e. foure leagues. And from the Poles riffe to the south end off Langeland, the course is west and by south six leagues. You may run through betwixt Langeland and Arr the Northwards and come out againe into the Belt by Nyburgh: from the south end of Langeland to Tassing, it is north and by west 6 leagues) you may sail about Tassing on both sides, and leave Arr and the foule grounds lying on the one side of you. Upon these grounds it is but six foot deep.

You may also saile through betwixt the foresaid grounds and Fuynen into the sound of Aelfen, unto the litle Ilands of Areu and Toreu, as hath been said here before.

From the litle Iland Areu to Apenrade the course is southsouthwest five leagues. The sound of Apenrade is a broad open sound, upon which lieth the foresaid towne of Apenrade.

From the river of Apenrade unto the crooked channell off Sonderburgh, which goeth in betwixt the Iland Aelfen and the maine land, the course is east 3 leagues, there you may saile through about behinde the Iland of Aelfen to Sonderburgh, and then forth into the sound of Flensburgh. It is very narrow and crooked betwixt the Iland and the maine land, but when you are come through the narrow and crooked channell into the sound of Flensburgh, there it is broader and larger.

The sound of Flensburgh goeth in betwixt Sonderburgh & Holsterland, being a broad sound. He that will saile in there,

must take very good heed of the Holsterside, when you begin to come betwixt the two lands, and run in alongst by the land off Aelft, for from Nubell or Holsterland lye off the Chalck grounds halfe wayes the deep. This sound lieth in west and by south untill that you come before the river. There lieth in the rivers mouth a litle Iland on the starboard side, you must run in to the eastwards of it, and goe in west and by south and west, untill you come within the crooked channell off the River or Sound, and then you must goe up againe southwest then you shall see the towne of Flensburgh lye before you.

Of the depths about these places, and in what depths men may see the land.

In the Ripe, Eyder and Hever, a south and north moone maketh the highest water, the south commeth there out of the northwest, and the ebbe out off the southeast, and so run over the north grounds.

In the deep of Lift or Silt, a south and north moone maketh the highest water, the flood commeth there out of the northwest, and falleth very little alongst the land, and the ebbe to the contrary.

In Knuyts deep, a southsouthwest and northnortheast moone maketh the highest water. The flood commeth here also out of the northwest and falleth but great quarter tyde alongst the land, and the ebbe to the contrary.

In the Haven of Zuyderzigt, the Grove deep, the Schellingkroegh a southsouthwest and northnortheast moone maketh the highest water, the flood commeth there also out of the northwest and falleth over the Reefshorne towards the Iutish Iland, and the ebbe againe to the contrary, of from the land in the north Sea.

Off the grounds and depths.

The grounds of the Hever & the banckes of the Smal deep without the strand and Eydersee, lye at least two leagues without the coast of the land.

Betwixt Holyland and Ameren or Strand it is tenne or eleven fathom deepe, in that depth you may see both the lands, if you climbe up in the shroudes. Strand is to bee knowne by the steeple of Pielworme, standing upon the south end of the land: Upon the Iland strand more churches and steeples, but none so good to be knowne as Pielworme.

Ameren is a league and a halfe long, & hath all alongst low sandhills growne with spiry grasse.

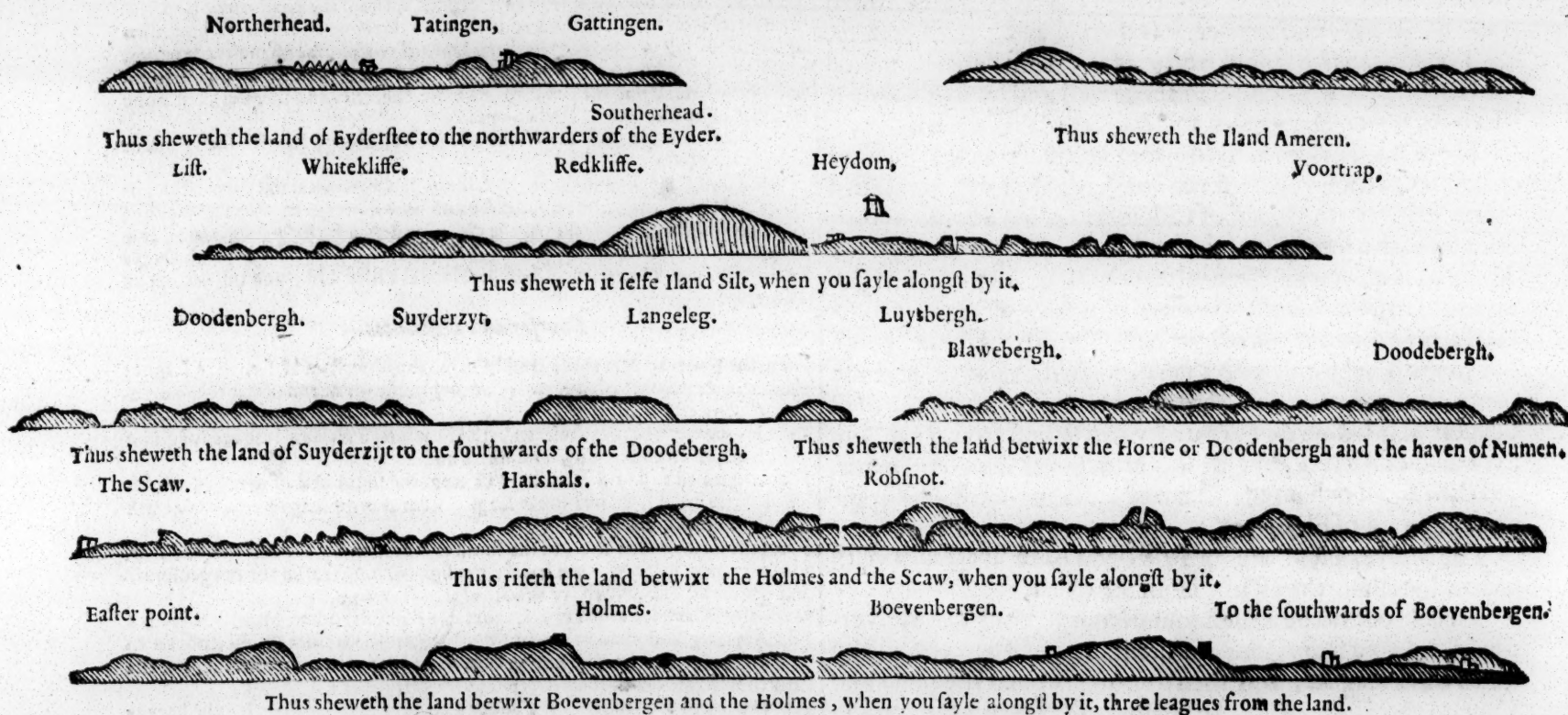
The Iland Silt you may see in ten fathom: upon this Iland (nearest to the north end) lieth a high steepe red cliffe, on both sides going sloping downe; upon the south side of the side of the cliffe standeth a flath Church, with a low steeple, and to the eastwards of it another Church, with a high thick steeple called Heydom. The north end of the Iland is called Lift, and the south end Voortrap.

Courses and Distances.

From the Eyder to Hever the land lieth northnorthwest and f. s. e.	5 leagues
From the Hever, or the south end of Strand to the south end of Ameren northnorthwest about	5 leagues
Two leagues north from Ameren lieth Silt which is about 5 leagues long, and lyeth south and by east, and north and by west.	
From the north end of Silt, called Lift, unto the south end of Rim or Rem, it is northeast and f. w. one great league, Rem is three leagues long, and lyeth most south and north.	
From the north end of Rem, to the south end of Manu, it is northeast and f. w. a league and a halfe, you can hardly get sight of it by reason of the grounds, and great showlds, which lye thwart of it to seawards.	
Manu and Phanu lye about two leagues one from the other, Manu is almost a league long, and Phanu about 4 leag. long, and lieth from Phanu Knuyter to Knuytes-deepe, f. s. e. and n. n. w. This Iland hath also a faire strand, but the north end towards Grouwedeepe is very flat.	
From Phanu to Dodebergh it is about 4 leagues, betwixt them lye the havens of the Grouwedeepe and Schelling-kroegh.	
From Holyland to the Eyder east and by north, and west and by f.	7 leagues
From Holyland to the outermost buy in the Hever, n. e. and f. w.	8 leagues
You may lye by the outermost buye in the Hever, and see Holyland with cleare sight.	
From Holyland to Ameren or Smalle-deepe, n. n. e. somewhat easterly, and f. f. w. somewhat westerly	10 leagues
From Holyland to the deepe of Silt or lift, north and by east	19 leagues
From Holyland to Knuyts-deep or Rypet-deepe, north and north and by east	25 leagues
From Holyland to the Horne or the Dodenbergh north and by S.	32 leagues
From Knuyts deep or the Iland Phanu to the Flye, f. w. and by f.	50 leagues
From the Iland Silt to the Fly northeast and southwest	46 leagues
From the Dodenbergh or the Horne, to the haven or Numen or Rinkopper-deepe, north and by west	7 or 8 leagues
From the Rinkopper deepe, or the haven of Numen to boevenberghen north and by west about	10 leagues
From the Dodenbergh to boevenberghen, the land of Iutland lyeth north and by west, and south and by east	17 or 18 leagues
From boevenberghen to the Holmes northnorthwest	9 leagues
From the Holmes to Robsnor or Robbe-knuyt northeast	9 leagues
From Robsnor to Hartshals northeast and by east	4 leagues
From Hartshals to the Scawe or Schagen eastnortheast	8 leagues
From Rinkopper or Numer-deep to the Fly southsouthwest or a little more westerly about	38 leagues
From boevenberghen alongst Iutland, without the grounds unto the Elve or the outermost buy south and by east about	50 leagues
From boevenberghen to Holyland, south and by east somewhat southerly about	45 leagues
From boevenberghen to the Flye or bornoriffe f southsouthwest about	69 leagues
From boevenberghen to the north Forland f. w. and by f.	118 or 120 leagues
From boevenberghen to the Holmes before Yarmouth southsouthwest	93 leagues
From boevenberghen to Flambrough-head westsouthwest	100 leagues
From boevenberghen to Scarbrouge w. f. w. somewhat westerly	100 leagues
From boevenberghen to the River of New-castle or Tynemouth west and by south about	106 leagues
From boevenberghen to boecknes west and by north about	106 leagues
From boevenberghen to the Naze northwest and by north	24 leagues
From the Riffe in sixteene fathom to the Fly f. and by w.	62 or 64 leagues
From the Riffe in eighteen fathom to the strait betwixt Callice and Dover southsouthwest about	120 leagues
From the Holmes to the Naze northwest about	19 or 20 leagues
From the Holmes to Fleckery northwest and by north	9 leagues
From the Holmes to Mardow north	24 leagues
From the Holmes to Longsound north and by east	35 or 36 leagues
From the Holmes to Ferderoer northnortheast	40 leagues
From the Scawe to Tynemouth westsouthwest	136 leagues

From the Scawe to the Naze west	33 leagues	From the Road of Sampfo to Ebelo southsouthwest, and f. and by w.	3 leagues
From the Scawe to Fleckery west and by north	25 or 26 leagues	From the south end of Sampfo to the land Ebelo, the course is f. w.	4 leagues
From the Scawe to Reperwick west and by north and n. n. w.	24 leagues	The northwest coast of Fuynen lyeth southsouthwest and by west	8 leagues
From the Scawe to Mardowe northwest and by west	20 or 21 leagues	From Endelaw to Melfersound southsouthwest	5 leagues
From the Scawe to the Longfound northwest and by north or a little more northerly	21 leagues	From Ebelo to Melfersound southsouthwest, somewhat southerly	6 leagues
From the Scawe to Ferderoer north and by west	13 leagues	From Sampfo to Roems southeast	5 leagues
From the Scawe to Otturen north and by east	24 or 25 leagues	From Syro to Rosnes southsouthwest	4 leagues
From the Scawe to Maelstrand eastnortheast	21 leagues	From by west Syro to Roems southsouthwest and south and by west	9 leagues
From the Scawe to Nidinck east and by south	15 or 16 leagues	From Wero to Balfack southsouthwest	4 great leagues
From the Scawe to Watersbergen east southeast	19 or 20 leagues	From Wero to Roems south and by east	8 leagues
From the Scawe to the Trendels southeast	8 leagues	From Romps to Knuytshead south and by east and southsoutheast	5 leagues
From the Scawe, about seaboard, the Trendels southeast and by east	8 leagues	From Knuytshead to Langeland southeast	4 leagues
From the Scawe to Lefolde, or the north end of the riffe f. l. east	8 leagues	From Knuytshead to the land Talling south	4 leagues
From the Scawe to Lefon southeast	8 leagues	From the southeast end of Fuynen the east point of Asken, west and west and by north	5 leagues
From Scawe to the small Helmes south and by west	4 leagues	From the point of Asken to the little lands of Areu and Toreu, west and by north and westnorthwest	2 leagues
From the Scawe to Seabuy south and by west	9 leagues	From Areu to Melfersound northnorthwest	2 leagues
From the Helmes to Seabuy	2 leagues	From the point of Rosnes in Zealand, to the land Syro, south	8 or 9 leagues
From Seabuy to Aelburger-deep south and by west	7 leagues	From Rosnes to Casser southsoutheast	9 or 10 leagues
From Aelburger-deepe to Mariacker south and south and by west	4 leagues	From Spro to Langeland southeast and by south	4 leagues
From Aelburger-deepe to Stevenshead southeast and by south	9 leagues	From the north end of Langeland to the south end south	8 leagues
From Aelburger-deepe to Haeslin southeast and by east	20 leagues	From the south end of Langeland, to the land Arr, the course northsouth and by west somewhat westerly	4 leagues
From Stevenshead to Haeslin eastsoutheast	13 leagues	From the land Arr, or Koping, to the Roen, the course is n. w. & by w.	5 leagues
From Stevenshead to the great Helme southsouthwest and south and by west about	6 leagues	From the Roen, to the little land Areu, west and by north	3 leagues
From Stevenshead to the point of Ebeltud southsouthwest	7 or 8 leagues	From Areu to Apenrade southsouthwest	5 leagues
From Stevenshead to Syro southsoutheast	8 leagues	From the river of Apenrade to the Strait of Sonderburg east	3 leagues
From the great Helme to Wero southsoutheast	4 leagues	From Sonderburg to the Sley, southeast and by east	4 leagues
From the great Helme to Sampfo southsouthwest	4 leagues	From the south end of Langeland to Femeren, the course is southeast and by east	6 leagues
From the south end of Ebeltud to Aerhuyfen west and by north and westnorth west	5 leagues		

How these Lands doe shew themselves at Sea.



The fourth demonstration,

Where in are portrayed how you shall sayle from the Koll in the Sound, and forth through the Droogen, untill you come about Valserboen, and further the coast of Holsten, Meklenburgh, and the Southern Islands of Denmark, from the Belt to the Ielle.

Haelin. From Coll to the land Haelin, it is southsouthwest and by west eight leagues, you may saile through betwixt Haelin and Zealand, untill you come into the Belt: the coast of Zealand is a faire strand, but somewhat to the westwards of Haelin, there shooteth of a riffe to seawards, which you must avoyd.

Roskil di-
fiourd.
Isenvoort. About eastsoutheast from Haelin goeth into the Land a great broad Sound, which without at the entrance of it, is a great league broad, there is good anckoring for a northwest winde in five or six fathom. The Sound divideth it selfe within the land into three parts, the first or the eastermost, called Roskildifiourd, goeth up southsoutheast unto Rockil, the second, called Isenvoort, lieth into the land south, and South and by West at least or six leagues, unto Isick by and Holbeck: within is at least two leagues broad, and in the midst lieth a great Island. The third lieth to Draeckholme also at least five leagues southsouthwest, and northeast, like the coast towards the Belt. The Coast of Zealand, betwixt Haelin and the Sound is a clean coast, you may saile alongst by the Land six or seven fathom, but come no nearer to it by night then twelve or thirteene fathom, for at some places it is steep, and shouldeth up suddenly. Where that little new church standeth, thwart of it, it is flat three and foure fathom, and to the Westwards of that wood which standeth to the Westwards of Lapsand, you may come in foure fathom by the shoare, without taking hurt, but coming neare Lapsand, you must keepe further off from the shoare, in seven or eight fathome, or els you shold gette behinde the pointe of Lappefand.

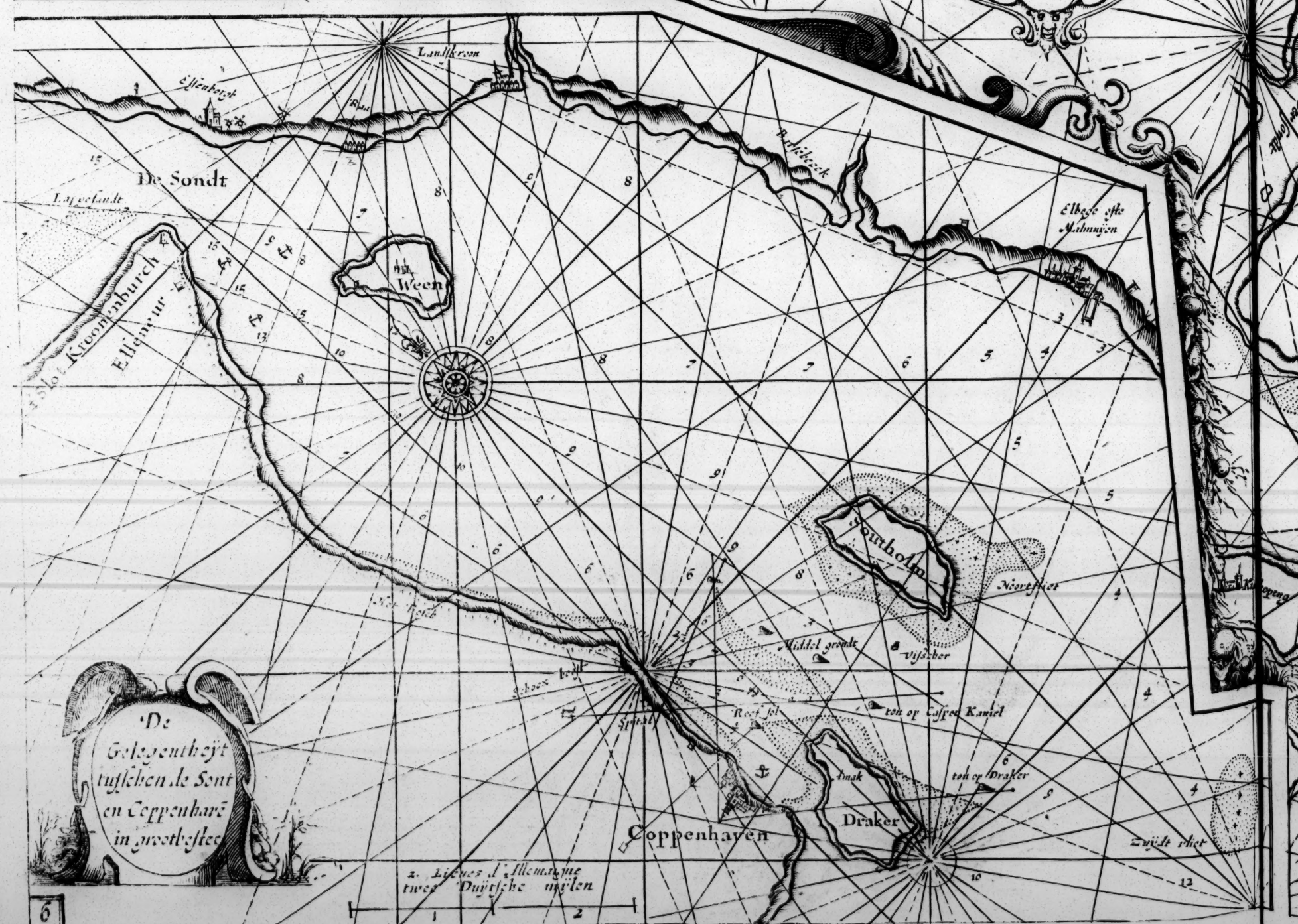
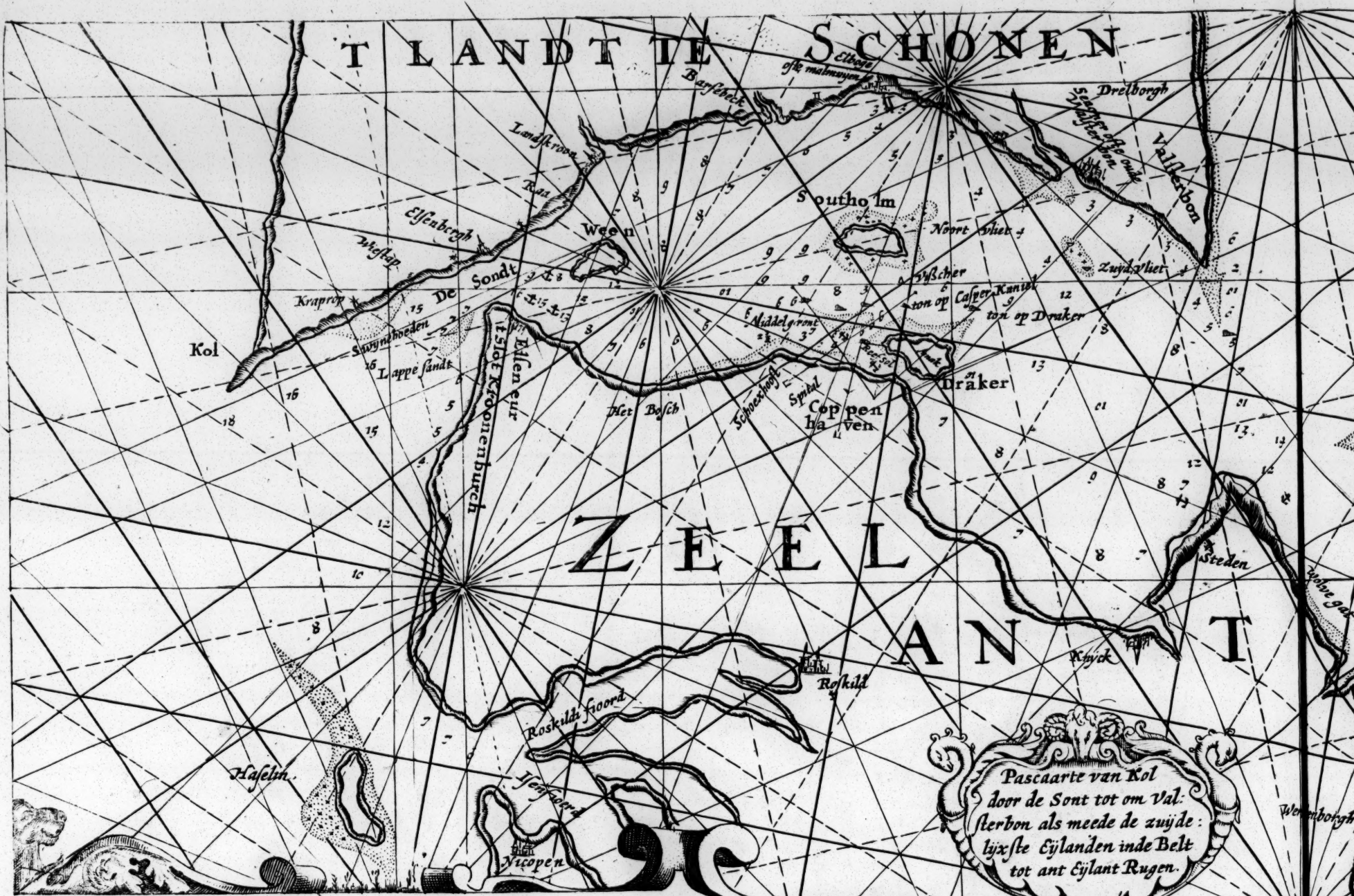
Lappefand lieth about an English mile to the Northwards Lippefand of Elfenore, or the Castell of the Sound, lying on the west side of the saile waye, alongst the coaste of Sealand. For to avoyde Lappefand you must be carefull of these marks, there standeth a houses to the westwards of the Kings mill, to the westwardes of the Castle of Cronenburgh, keep the Chimney of that house to the westwards of the front of the Kings mill, and then you can take no hurte of Lappefand, then runne alongst by it in six, seven or eight fathome, so long untill that the east end of the land Ween cometh a little without the castle of the sound, keepe that so standingh, and saile so in fixe or seven fathom somewhat close alongst by the castle: you may plainly see lying through the water al that can hurt you.

If you will shift roads out of the Sound, and anckor behinde Lappefand, then saile thwart of the foresayd Kings house called the Caux or Kings mill, so that it doe stande about south or south and by west or south and by east from you, anckor there in 6, 7 or eight fathom, there it is good lying out of the current and sand ground: but if you will anckor in twelve, thirteene or fourteen fathome, there it is soft ground, and there goeth a strong current with southerley or southeast windes, but you lye there better, in more roome, for to sayle inwardes againe, if it should happen that the winde did sodenly shift out to the northwest. It happened once to one of my acquaintance, that head anckored somewhat to the eastwards of the Kings-mille, in fixe or seven fathom and the winde did shift in the night to the northwest, when they weighed their anckor the shippe fal towards the land, and before they coule get the ship about

no.

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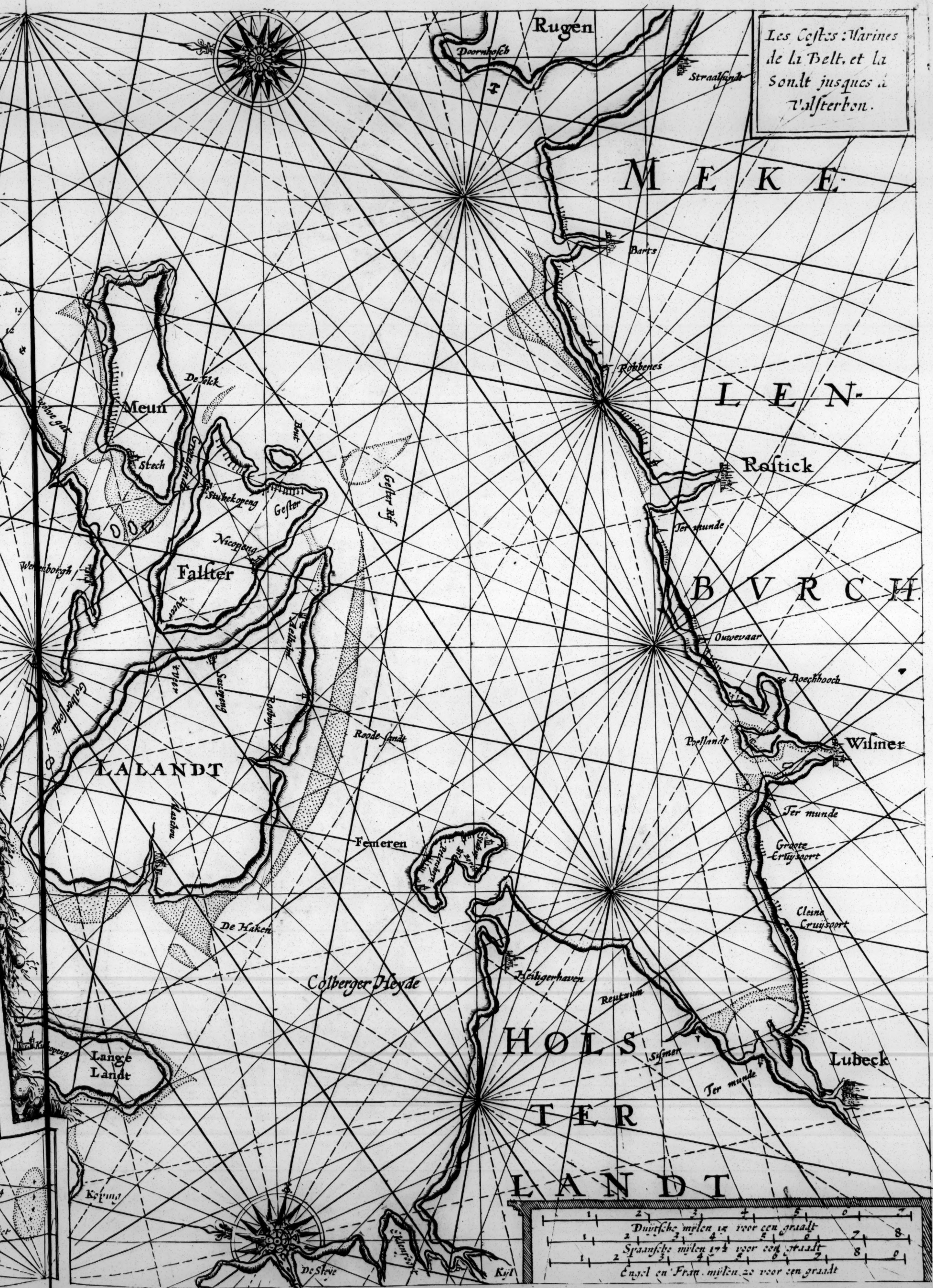
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Pascaarte van Kol
door de Sont tot om Val-
sterbon als meede de zijde-
lyxte Eylanden inde Belt
tot ant Eylant Rugen.

De
Geleenthoijt
tusschen de Sont
en Coppenharē
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2. Lignes d'Allemagne
twee Duitse mylen



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about before the winde, they did runne in three fathom over the point of Lappeland.

Swyneboden.

For to avoid the Sound.

For to sail out of the Sound.

From Coll to Elleneure or the Sound the course is south-east, and southeast and by south four or five leagues. About halfe wayes betwixt Coll and Ellsenburgh lye the Swynebouden, which are some foule rocks, and suncken rockes, which lye of to seawards a good wayes from the land. But when you sayle towards the Sound comming from Coll, then keep the lland Ween hidden behinde the Castle Cronenburgh; and then you can not fail foul of the foresaid Swynebouden, when that you reckon that you are past them, then runne in amidst the channell, for to avoide Lappeland, or els if you bring the end off Ween then again right without the castle, or keepe in seven or eight fathom from the Sealands side, you can not take hurte of Lappeland, when you are come within the castle, you may anckor where you please. The shippes doe commonly anckor all alongst by the land untill to the southwards of Elleneure, there it is fifteene and sixteene fathome deepe, but with a southeast winde it is badde lying there.

Towards the lland Ween lieth a banck of eight or nine fathom it is better lying there, but is somewhat farre from the land.

When you will sail out the Sound towards Col, and are come to the end of Lappeland, then goe northwest and by west for to avoide the Swynebouden, untill that Coll be northnortheast from you then goe boldly northwest and by north, or north-northwest, according as the winde shall be, for with a northeast winde, you must runne out northnorthwest verie close alongst by Col, for to sail a weather of the Riffes of Anout and Lefon.

For to saile to Elleboge or Malmuyen, and Lands-kroone.

If you will sail out of the Sound to Elboge or Malmuyen, goe from Ween southeast and southeast and by south, and then you shal see the steeple or the towne lying before you, sail towards it, in that farewaye, it is most seven or eight fathome deepe: when you come within the south-holms, it will be 5 or sixe fathom deep, it doth shoulde up sodenly, from the seven fathome to five, but before the towne it is shoulder water, you may anckor there in three, four or five fathome if you will, you may lie also at the end of the Head, in three fathome, there it is good lying, but with a northwest winde it is a bat roade, for it bloweth there open in.

Northvliet

Southvliet

If you will runne out againe to the southwards of the South-holmes towards Falsterborne or Steden, you must take heed of the South-holmes, which are foule round about. From the n. end shooteth of a riffe a great wayes: Upon the east side, at the south end, it lieth verie farre off shoulde, there lyeth also the Northvliet, that is a ledge of rocks under water, but you may perceive it through the water, you shall leave it on the South-holms side, to were, on the starboard side of you: but the Southvliet, which lieth thward of old Falsterborne, you shall leave on the larboard side, and so runne through betwixt then, it is in that farewaye at the shouldest four fathome deep. When you come off from Malmuyen, and that the steeple of Copenhagen come to the S. end of the south-holmes, then you are past the Northvliet. When you saile thus there through, you must be verie carefull to avoide these foresaid groundes. You may runne out also alongst by the strand of Schoonen, and leave both the Northvliet and Southvliet lying on the starboard side: you may found that strand in four and five fathome, as also the riffe of Falsterborne.

Landscroone.

He that will sayl into Landscroone, must know that there lieth a shoulde before the havens mouth, & must runne in about to the southwardes of it: there standeth a litle church on the north side, by the water side and a Gentlemans house somewhat farther within the land, bring that church over the house, and then you are cleare of the shoulde, then saile in right with the poynt, and anckor in three fathome.

Hulwater.

To the northwards of old Falsterborne goeth in a deepe, called Hull or Hulwater, it is a deepe haven for ordinarie shippes, which goeth in must northeast in three or foure fathom; you may found it in alongst by the footstrand of old Falsterborne in three fathom, leaving old Falsterborne on the starboard side, it is there large and broad enough.

How men shall saile out of the Sound, through the Shoulde or groundes, and into the Reefshol.

ther

He that will sayle out of the Sound towards the Shoulde or Grounds let him goe on south and by east, or hee may found alongst by the wood, in five or sixe fathome and then the shall not saile misse of the Norther buye, for it lyeth in five or six fathom, on the north end of the Middle ground, to the eastwardes of the buye it is seven fathom deep, but in the right

farewaye thwarte of this buye it is nine or tenne fathom deep: the markes of this buye are, when that end of the wood is westsouthwest from you, then you are thwarte of the norther buye, & there standeth then a flat steeple, a pretie wayes to the S. wards of that wood: there cometh also three hommocks to the north side of the town, these are all markes of the norther buye.

From the Norther buye to the middlebuye the course is south and by east. When you come by the Middlebuye, then commeth the southermost mill on to the southwardes of the towne op Copenhagen, and the flat steeple commeth within a handspikes length unto the sharpe steeple, that are the markes of the Middle buye, or second buye in the shoulde or groundes, it is there eight and nine fathome deepe.

From the Middle buye to the third, and for to the buye up- on Casper Caniell, the course is south and by east. When the white castle commeth over the sharpe steeple, that are the markes of the fourth buye, or the buye upon the Casper Caniell, the third lieth at the south end of the Middle ground, it is not there verie broade, but steepe on both sides, the deepe thereabouts is seven or eight fathome: If you must turne to windwards there, you must east about, so soone as is doth beginne to shoulde, as well on the one side is on the other.

The fourth buye lieth on the north end of Draecker upon the flat, over against it lieth a rock above water, called the Fisher, east & by north from the buye, ther you may wel found the southholme, for it is there shoulde water. Betwixt the third & this fourth buye commeth running out a channell from Copenhagen, which men doe call Casper Caniell, or the Kingsdeep.

Fisher.

Buye upon Casper Caniell.

From the fourth buye or Casper Caniell, to Draker riffe, the course is south, and south and by east: the land of Draecker you may found in three, foure, or foure fathome and a half.

Riff of Draker.

The Riffe of Draecker lieth a good wayes without Draker, it lieth off halfe league east into sea. The markes of the buye upon Draker-riffe are these. When the steeple of Copenhagen commeth to the southwards of Draker to the wood, then you are thwart of the buye. The shouldest water that you shall finde betwixt this buye upon Draecker-riffe, and the foresaid fourth buye, is five fathom leffe two foot. For to sail by night through the shoulde or groundes, go from the lland Ween south and south and by west, so long untill that you come thwart of the point of the wood in 4 fathom, then keep somewhat off from the shore, and go on southeast and by east, untill that you come in 7 fathom, and then forth southsoutheast, untill you be over the Middle-Ground, the first or northermost buye, as is before said, lieth in five or sixe fathom, but you may well go over to the westwards of it, in three or foure fathom, keepe then somewhat off untill that you come in eight, nine, or ten and eleven fathom, and sail then on south unto Casper Caniell, there it will be by litle and litle shoulde, to wit, about eight fathom. Thwart of Draker it is uneven for to found, the one cast five & the other foure fathom, but go your course, except you knew that you were neerer the one shore of Draker, or the Southholmes, then the other, Without Draker it will be againe 6 and 7 fathom deep.

For to saile into Rifsholl or Copenhagen, comming from the northwards out of the sound, runne along somewhat to the westwards of the Norther buye, for to avoid the plate, or Middle ground, which lieth to the westwardes of the buyes in the shoulde, which upon the north end is not deeper then 12 foote, and on the south end eight, nine, and at some places ten foot deep, al hard stony and rocky ground, keepe the founding of the shore on the west side in two, three, or foure fathom, so deep as you please, untill you com before Copenhagen, on that side you can take no hurt, it is there broad and wide, and lieth in south and by west, in the middest betwixt the shore and the Middle-ground, it is 5, 6, and 7, fathom deep. If you should turne to windwardes there, to come not neerer the middle-ground then in foure fathom but, the west shore you may runne to by may runne to by your lead, as you please.

From the north end of the lland Draecker runneth off a riffe to the northwards, upon the point off that riffe lyeth a buye, which men do call the buye in the Reefsholl, leave that on the larboard side, & run in, until you come before the towne, and anckor there. If you come from the southwards, and will sail unto Reefshol, then run alongst to the eastwards of the foresaid fourth buye (which men do call the buye upon Casper Caniell) then loose up presently about by it, and go on N. W. into the Kingsdeep, unto the buye in Reefsholl, which lie one from the other due northwest, and southeast: you shall then also see eight out a head, in the northwest within the land a flat steeple right over a great house or Hospital, that standeth close upon the sea-side, keepe them so one in the other, and sayle right

Buye in the Reefsholl.

in with them, and so you shall runne in right amidst the channell, it is there in the farewaye, five, fixe, seven, and eight fathom deep. This Kings-deepe is somewhat uneven of ground, therefore be careful in using of the lead, and come not to neere the north side; that is the Middle-ground, which is very foule and rocky: from the S. shore (about halfe wayes betwixt the two foresaid buyes) it lieth of somewhat should, so that you shall have at one cast five or fixe, and the other but 3 fathom.

When you come by the buy in Reefsholl, which lyeth upon the point of the norther riffe of Draecker, leave that on the larboard side, and runne on south about by it unto Copenhagen. The markes of this buy are these: there lieth a round hommoock or great rock about halfe a league within the land, when that is right e. from you, then it cometh right with a flat steeple which stands about a league within the land, then you are even thwart of the buye, or point of the foresaid riffe. These markes will serve at times when the buye lieth not there. A litle to the northwards of that buye lye the great ships which taray for wind in 5 or 6 fathom, there is good anchor ground.

Kuyck.

From the buy upon Draker-riff unto Kuyck the course is S. W. 5 great leagues, but unto the riffe of Falsterborn, or Steden it is south and south and by west 5 leagues, in the fareway betwixt Draecker and Falsterborn it is 6, 7, and 8 fathom deep, but between Falsterborne and Steden, 10, or 12, and 13 fathom, but by Steden deepest.

Road under Steden

Under Steden you may anchor as well to the southwards of it, for northerly, as to the northwards for southerly winde. If you will anchor for northerly winds, then run in betwixt Steden and Meun, a good wayes into the bay, so that the steep point of Steden lye about northnortheast from you, anchor there in eight or nine fathom, and you shall lye land-lockt for north and northwell winds.

But if you will anchor for south or southwest winde, then ankort to the northwards of Steden, so that the southeast point be south and by east, or southsoutheast, and the N. W. point northwest or westnorthwest from you, there it is good lying in seven fathom, the ground is there small white and blanch sand. If you wil set saile from thence to the shoulds or grounds, then go not more northerly then northeast, so long untill that you come by the riffe of Draker, then run about by it in five fathom.

To the northwards of Steden the coast of Zealand goeth in with a great bay into Kuyck, it is there all to the westwards should water or five, fixe and seven fathom, and good anchor ground, so that you may anchor every where there abouts.

Markes off the riffe of Falsterborne.

The riffe of Falsterborne lieth off southwest to Seawards a league and a halfe. It is a fowle stony and rocky riffe upon the end of it lieth a buye in foure fathom. You may run about by it upon your lead in five fathom with small or ships off litle draughts. Men doe hold for a mark of this riffe that when the steeple of Falsterborn and the castle come one in the other, that then they are thwart of the point off the riffe. He that commeth from the northwards, and will saile about Falsterborne with a northerly or northeast wind, and that he wil come somewhat neere about the riffe, and commeth in five or fixe fathom he must be very quick in using the lead. When old Falsterborne Church commeth halfe wayes to the Castle and the Church off Falsterborne, then beginneth to come the worst and shouldst off the riffe, that lasteth untill that old Falsterborn church cometh to the eastwards of the houses of Falsterborne, before that you are not past the riffe. If you should luffe up sooner about by it, you should run in great danger with a ship of great draught, you shall have (comming against the riffe) the one cast four or five and then presently three fathom upon it all hard stony ground. Therefore it is best with a ship that draweth 12, or 14 foote, to come no nearer this riffe then in 6, or 7 fathom.

If (when you come from the eastwards) you will saile about Falsterborne, and come alongst the shore with a northeast wind in fixe or seven fathom, and Falsterborne is about north, or northnortheast from you, then is shouldst up very fast in two fathom, or two fathom and a halfe. Therefore keepe you ferther off from the shore in 10, or 12 fathom, so long untill that the castle bee northeast, or northeast and by north from you: or that old Falsterborne church come halfe way to the castle of Falsterborn and Falsterborn church, then you can not saile upon the riffe from the eastwards, but running about by it in five fathom, then you must be very carefull in using your lead. But if you wil come neere the riffe in foure or five fathom, when old Falsterborn Church commeth too the east end. Falsterborn, you shall run in great danger for to come on ground. When you come within the riffe, you may run alongst by the coast of Schoonen in four fathom without taking hurt.

To the southwards of the Sound of Flensburg, lye yet three Sounds or rivers, where great ships may goe into, to wit, the Slei, Nylhofvoert, and the Sound of Kiel, the land lyeth of from Flensburg to Kiel southsoutheast or somewhat more easterly fixe leagues.

From Sonderburgh to the Sley the course is southeast and by east 4 leagues, that is, a broad deepe sound, lying in first about west, and when you are within it, then it runneth in about southwest and by west past Sleefwyke, there also come out many great ships. The town Gottorpe lyeth also upon this river.

Betwixt the Sleye and Ciel lieth Nylhofvoert, upon it lieth a litle town called Eeckelenfoort.

The Sound of Kiel is a broad Sound, which lieth in about southwest, there you may go in also with great ships. From Kiel to the west end of Femeren it is east and by north about eight leagues.

From the Poles riffe to Femeren (over the Coelbergher Heyd) the course is eastsoutheast 13 or 14 leagues, but from the south end of Langeland unto Femeren it is southeast and by east 7 or 8 leagues. The channell betwixt Femeren and Laland is 5 and 6 fathom deepe, you may saile round about Femeren, there it is all should ground. Betwixt Femeren and Holsterland, you may run through in 8 or 10 foote, there lieth a litle town, called Heyligher haven, where you may anchor with ships of small draughts from to lade wheat or barley. From the land Femeren to Gester-riffe the course is east and by north ten leagues. But from Femeren to the Trave of Lubeck S. S. W. ten leagues: there goeth in a good Deep for great shippes, it is deep upon the banck 12 foot water.

There is also great bay and a good haven, where men may lye safe for all winds, except the northeast and northnortheast winds. From the Trave of Lubeck to Gester-riffe the course is northeast and southwest about nine teene leagues.

From the Trave of Lubeck to Wismerdeep the course is first northeast and by east, and then east northeast, there goeth in a faire deep for all sorts of ships.

For to saile in at the deep of Wismer, bring the steeple upon the south land south from you, and saile so in untill that the steeple standing upon the eastland, by that eastermost house, commeth to the five or fixe houses, by these houses stand some trees together, from that eastland runneth off a litle riffe, lying off northwest and by north from it, when the steeple commeth to those houses, then goe in southsoutheast, in that deepe is twelve foot water. In the Summer there lye two buyes in the havens mouth, the one upon the tayle of the sand that shooteth off from the eastland, and the other upon the should ground, you must run in betwixt them. This deep of Wismer lieth from Femeren south and by east distant about seven or eight leagues, but from Wismer to Gester riffe, the course is northnortheast, twelve or thirteene leagues.

About south from Gester riffe lieth Rostick, there goeth in also a good deepe of ten foot, it is there very flat, you may found it in on both sides with the sounding poll. Wismer and Rostick lye about eight or nine leagues asunder.

Somewhat to the eastwards of Rostick lieth a high land called Robbenesse, from it shooteth of a great riffe or should too seawards, towards Gester riffe, it is betwixt Gester riffe and that should not deeper then twelve or thirteene fathome. If you come nearest to Gester riffe, then it doth should up suddenly, but if you come nearest this should, then it shouldst by litle and litle. Gester riffe, as hath been before said, is a should riffe, and runne off at least 3 leagues into sea.

A litle to the eastwarde of this foresaid should lieth Barts, there goeth in a deepe of 6 foote, at the west point goeth of a riffe, which men must avoide.

Three or four leagues to the eastwards of Barts goeth in the Jelle, there men doe goe into Mesond, or Straelsound there is no more then fixe foot water. In the Jelle lye three buyes, which you must leave al on the starboard side, being past them eastwards, up unto the beakon upon the Iell, you must loofe up about by it, and saile to the middle plate, which you must leave also on the starboard side, and then south and by east unto Straelsound. Within the mouth of the deep, it is 12 and 14 foot deep.

The Iland Langeland is about eight leagues long, and lieth south and north, to the eastwards, over against it lyeth the Golverfound, lying into the northwards of Laland, all alongst up unto Nestvelt and Wordenborgh and commeth into the Greenfound, and into the Wolvegat, and again into the East sea: Before the Golverfound lie three litle Ilands the one at the point of Laland, which is called Wedero, and is also fast to it with a riffe, so that men can not sail through there betwixt them;

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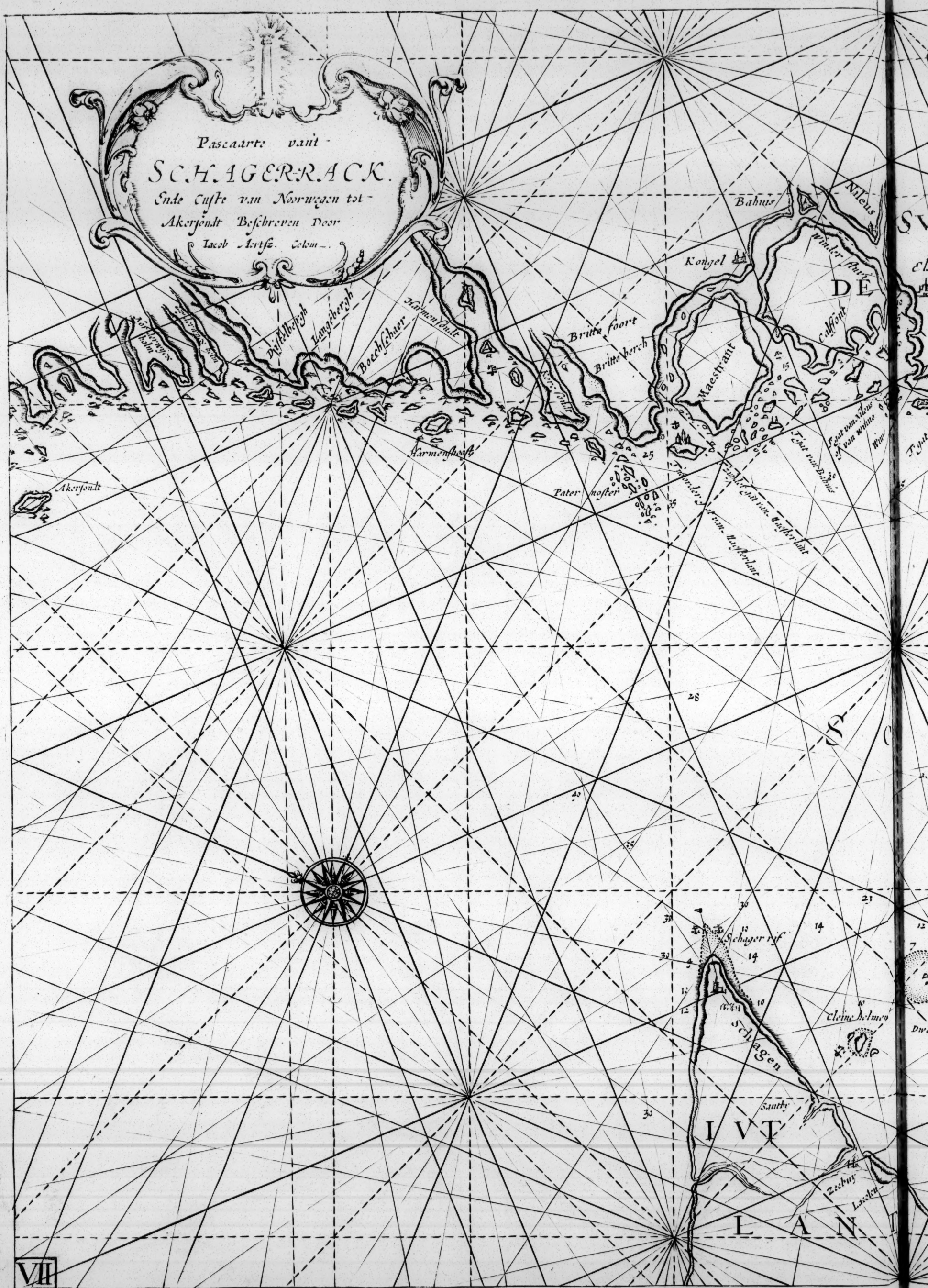
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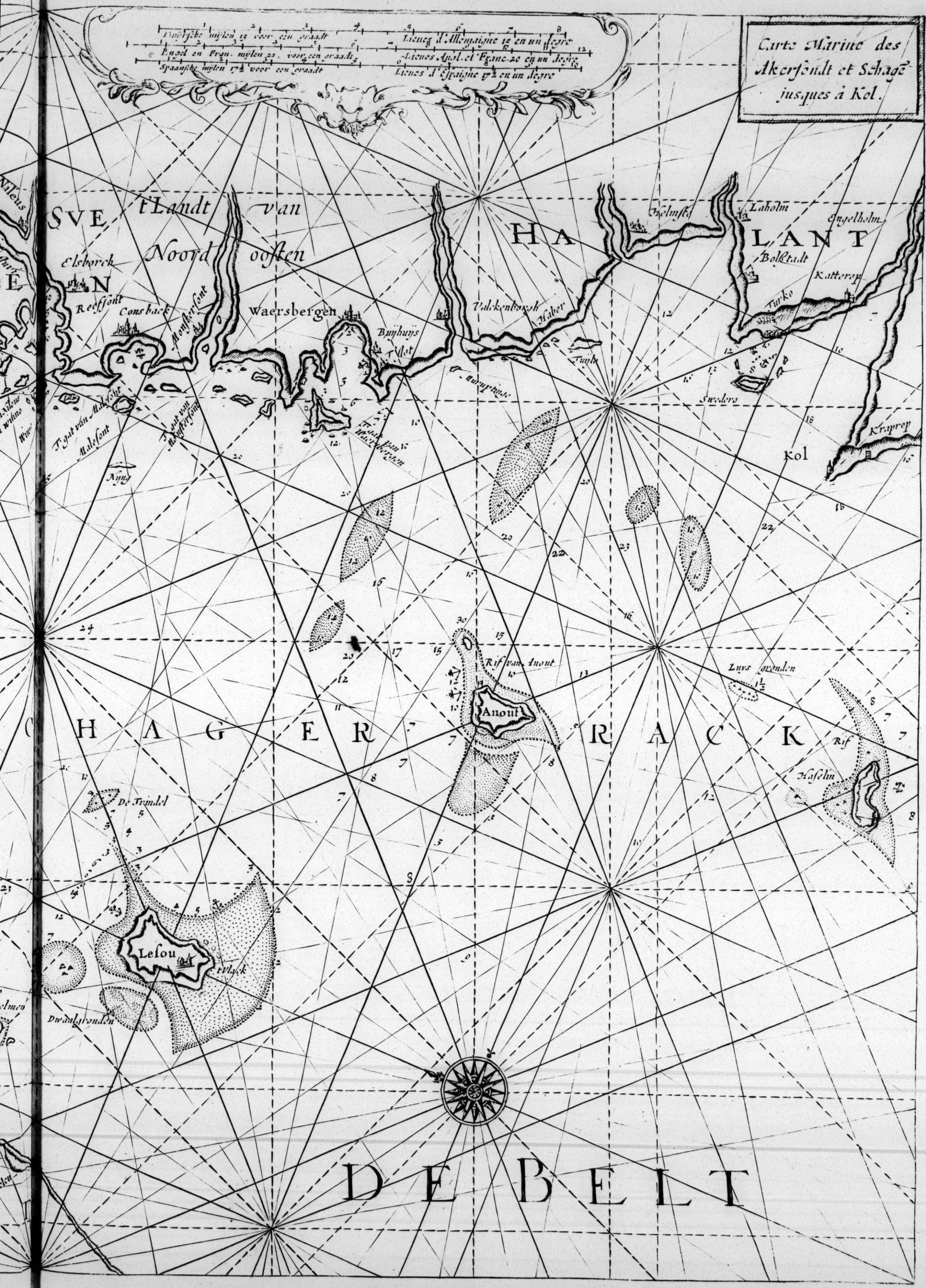
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Duitſche mijlen 12 voor een graadt
 Engels en Frant. mijlen 20 voor een graadt
 Spaanſche mijlen 12 voor een graadt
 Lignes d'Allemagne 12 en un degré
 Lignes d'Angleterre et France 20 en un degré
 Lignes d'Eſpagne 12 en un degré

Carte Marine des
 Akerſjont et Schagē
 juſques à Kol.



Arnis
Ooms.

Riffe on
Laland.

Redfan

Aelhol
Roodb

Nicop

Gester

Dou

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found.

Tol

Str
kuype

A
foun
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Arnis
Ooms.

Riffe on
Laland.

Redsand.

Aelholm
Roobuy.

Nicoppen

Gester-rif.

Bout:

Green-
sound.

Tolck,

Stuybe-
kuype.

them; to the northwards of it men doe runne into the Golver-
found, leaving that Iland on the starboard side: the other two
lye to the northwards of the foresaid Iland of Wedero, the
one is called Arnis, and the other Ooms. Ooms is a little
playne Iland, but Arnis is the greatest, which lyeth nearest to
Zealand, and is full of trees. From the Iland Ooms, lyeth off
a riffe south west to seawards, which is a great league long, and
upon the end flatte, which men may runne over by the lead.
When you will sayl into the Golverfound you must leave these
two Ilands lying on the larboard side. The Iland Laland hath
upon the west poynt over against the south end of Langeland,
a riffe or Hooke, lying off from Laland at least half wayes over
the Belt: for to avoyde that, you must runne alongst within an
English mile to the eastwards of Langeland; or when you leave
the two third partes of the water on Laland's side, and the o-
ther third part on the side of Langeland, you shall not come
too neare it. When you come from the fourthwards, and are
bound into the Belt, and that then the steeple of Mafcou,
which standeth upon Laland commeth to stand northeast and
by east from you, then you are past that riffe, and lyeth to the
fourthwards of you: It is here in this channell betwixt Laland
and the south end of Langeland, five, sixe, and seven fathome
deep.

From the south end of Langeland to Femeren the course is
S. E. and S. E. and by east distant 7 leagues.

When as you come off from Langeland and are past the
riffe or Hooke of Laland, then the south coast of Laland lieth
east and west: alongst by it lyeth a sand, which is called the
Red-sand, and lyeth alongst untill before Calverfound which
runneth in betwixt Laland and Gester.

To the northwards of this sand is a rode of 14, 16, and 18
foot water, before the little townes of Aelholm and Roobuy,
where men do lade nuts and Barley.

Betwixt Laland and Gester, thwart of this redde sand (as
hath been sayd) runneth in the Golverfound, which men may
run into, and come out again in to the Belt, but in this found
or channell there is little depth, there lyeth a stonebanck
within thwart over the channell. The little town Nicoppen
lieth upon the Iland Falster a league within Gester. From Ge-
ster shooteth of Gester riffe, at least three leagues into sea,
which is a showld riffe.

To the eastwards of Gester rif lieth an Iland called Bout, it
is there abouts allshoud water; to wete, 3 and 4 fathom.

To the eastwards of Bout goeth in the Green sound, by the
little towne Stuybekuype, and commeth out again into the
Belt to the northwards of Laland: the Green sound lyeth in
about west and west and by north in three fathom, there lyeth
a showld on the larboardside of the mouth of the Sound, called
the Tolck, which men must avoyde: you must goe in to the
eastwards of it, you may lead it in alongst by the land of
Meun, in 14 or 15 foot, that foresayd town Stuybekuype lieth
about a league within the mouth of the chaunel.

From Gester rif to Meun, the course is northnortheast eight

leagues: but from Bout to Meun it is northeast about 7 leagues

From the Golverfound to Meun, the land lieth in a bay,
you may ankor there for a northeast, north, northwest, and
west winde, in five and six fathom.

He that commeth out of the Sound, and is bound to the
fourthwards of Meun, may come so near Meun as he will, and
loofe up to the westwards by the poynt, and ankor where he
please, in five or six fathom. On the north side of Meun you
may also ankor in 6 fathom, be inde a little riffe that shooteth
off from the north point, for an east, S. S. W. and west wind, it
is there all over flat, and good ground.

From Meun to Steden, the course is northwest and by north
4 leagues, betwixt them both goeth in the Wolfound, or
Wolvegat, that runneth past Werdenborgh and Nestveld
through the Golverfound out into the Belt.

Meun and Falsterborne lye north and by east, and south and
by west five leagues asunder.

Of the streames on these coasts.

Through the Sound and the showldes or grounds, the streame runneth com-
monly with the winde, but the most part of the time to the northwards, be-
fore the coming of a hard east winde, or when it hath blowne out of the east,
then the streames runnes still out the northwards.

Courses and Distances.

From Koll to Elfenour the course is southeast, and southeast and by south	4 or 5 leagues
From Lapland to Ween southsoutheast	3 leagues
From Elfenour too the northerbuye in the showldes or grounds, south and by east	6 leagues
From Elfenour to Landscroon eastsoutheast	4 leagues
From Ween to Malmuyen f. e. and f. e. and by south	6 leagues
From Malmuyen to Reef-holme west	5 leagues
From Malmuyen to Steden southsouthwest	8 leagues
From the buy upon Draker-riffe to Kuyck S. w.	5 great leag.
From the buy upon Draker-riffe to Steden, the course is south and by west	5 great leagues
From the buy upon Draker-riffe to the buye upon Falster-bornes-riffe, the course is south	5 leagues
From the south end of Langeland to Femeren, the course is southeast and by east	7 or 8 leagues
From the Foolsriffe, lying on the Iland Aelit to Femeren, the course is E. S. E.	13 or 14 leagues
From the Sleye to the Kiel southeast	4 league
From Kiel to Femeren, the course is east and by north	8 leagues
From Femeren to the Trave of Lubeck southsouthwest	9 or 10 leagues
From the Trave of Lubeck to Wismerdeepe, the course is first northeast and by north and then eastnortheast in all	9 leagues
From Rostick to Robbenes, the course is northeast	5 leagues
From Robbenesse to Doornbosch northeast and by east	7 leagues
From Femeren to Wismerdeepe, south and by east	7 leagues
From Femeren to Rostick, e. f. e.	8 or 9 leagues
From Femeren to Gester-riffe east and by north	9 leagues
From the Trave of Lubeck to Gester-riffe northeast	19 leagues
From Wismerdeepe to Gester-riffe northnortheast	12 or 13 leagues
From Rostick to Gester-riffe the course is north	7 or 8 leagues
From Gester-riffe to Dornebosch east	9 leagues
From Gester to Meun northeast	7 leagues
From Meun to Steden northwest and by north	4 leagues
From Meun to Valsterborne north and by east	5 leagues
From Meun to the buy upon Falsterborn-riffe north	4 or 5 leagues

How these Lands doe shew themselves at sea.



Thus sheweth the land and the church of Aelit, when you are 2 leagues and an half by east Aelburger-deep.



Thus sheweth Zealand, when you come from Anout, and wil sayle toward the Sound.



Thus sheweth the land of Schoonen of from Coll unto Falsterborne, when you sayle through the showlds or grounds.



When you sayle to Lubeck, alongst betwixt the land of Gruyfoort and Holsterland, then it sheweth it self on both sides thus.



Thus sheweth the Coast of Mekelenburgh, betwixt Gruyfoort and Doornebosh, or the Ielle, when you sayle alongst by it, a league without the land.

The fifth demonstration,

Where in are shewed the Coast off Norway, betwixt Akerfound and Koll.

Aker-
found.

Grafwyke

From the Sister to the Iland of Akerfound, the course
is west and by north 4 leagues, betwixt them lyeth the
Grafwycke, within the Sisters, lying from Farder east
North East about 7 leagues. When you will sayle in there,

you must leave the sharp point on the larboard side, within
lieth a round rock, which you may sayl about on both sides,
thwart of it is good ankorground. North from this rock
lyeth a great Bay, fit for ships to lye in, that tarrie for a winde,
within

within lyeth also a round rock. Men do run in alongft by the west land, which lieth in first north, and about the lland north-northeast, they leave the lland on starboard side, and run in N. N. W. by the west land. To the eastwards of Graswike, also betwixt the Sisters and Akerfount lieth Shiphill, that is a Haven where men lade Spars and fat wares.

Ottrom.

Norther-
wixholm.Pater-
nollers.

The lland Akerfount men may sayl round about it, to the northwards of it lieth a great Bay or Sound, lying in farre within the Land, called Ottrom.

To the southwards of Ottrom lie Northerwixholm and Southerwixholm, 2 great llands, in a great fount, which lieth far and deep within the land, upon it (far within the land) lie many little townes, as Oldburgh, Oldwhat, Alleroes, and Dra-

The Pater-nollers are a great rane of Rockes, which lie farre off to seawards from the Coast, behinde then, to wit, on the south side, goeth in, within the land a broad fount, upon the south-side of it lieth a great high round rock or hill, called Britto. To the southwards of that fount lieth the lland of Maelstrand. He that cometh from the Scaw, and desired to sail to Maelstrand, let him go on eastnortheast, and then he shall get sight of the foresaid hill Britto, which he shall set eastnortheast from him, and saile so in right with it, untill that he cometh by the

Pater-nollers, he must leave on the starboard side, and saile alongft by them eastnortheast, and east and by north, and then he shall runne in sight of the lland Maelstrand, upon which standeth a great stony beacon, or Warlock, where sometimes standeth a mast with a barrell upon it, and sometimes also there standeth none. You may run in on both sides the lland, either about to the northwards, or to the southwards of it, according as shall be best fitting for the wind: If the winde be at west or southwest, then you may best run in at the norther channell, or if the winde be at south, or southeast, then it is best to runne at the souther channell. The norther channell lieth in by the south side most east and by south, and e. s. east, but the souther channel east and east and by north. When you come within the lland, you may saile about by it, untill you come before the towne, which you shall see then lying before you. Men doe ankor there with an ankor to seawards out a head, & make fast a cable out a stearne on the kaye, lying so wit the stearne to the shoare.

About the middest, going in at the souther channell, lieth a rock above water, which you may sail about on both sides, but within that rock lieth a suncken rock under water, and to the southwards of it also a great rock, but a little further out then the other. There lieth also a suncken rock under water by the lland on the north side of the foresayd rock wch lieth above water, which men must be very careful to take heed of. There is every where good ankorground. From thence you may sail through within the rocks to Calf-sound, Bahouse and Nilus.

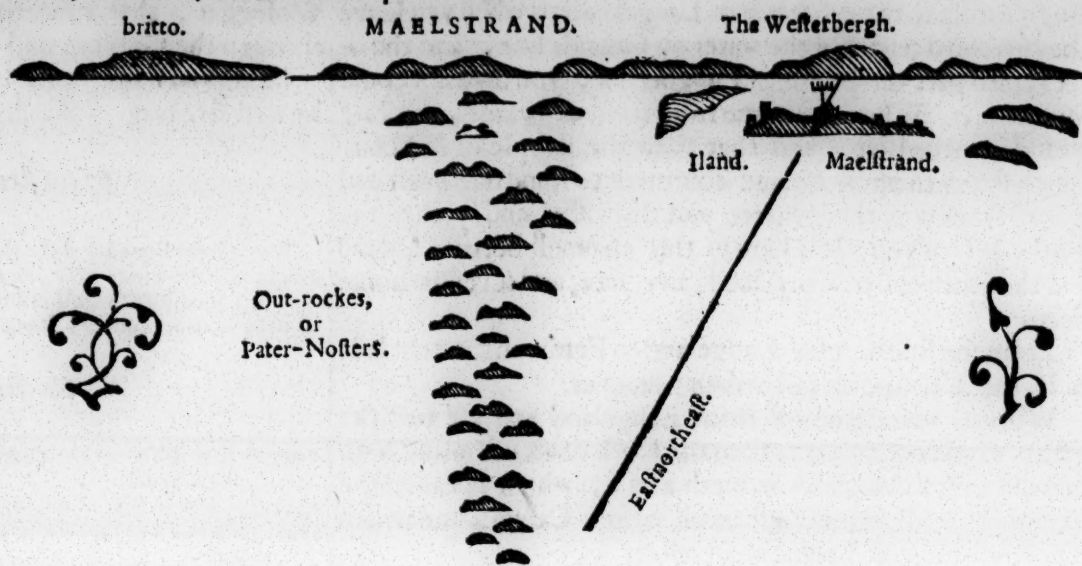
Calf-sound

Calf-sound lieth distant from Maelstrand about foure leagues. For to sail in there out of the sea, you must runne alongft to the southwards of a great rock, whereupon standeth a Warder. On the south side of the Havens-month there are

gens, from thence commeth much fat ware. Southerwixholm and the lland Akerfount, lie northwest and by west, and southeast and by east 5 leagues asunder.

From Southerwixholme to Harmanthead, the course is S. southeast 5 leagues, betwixt them lieth Boechschaer, but two leagus to the southwards of Harmanfount lieth Kerckfount, Which is a great river, which lieth in far within the Land.

Harmanthead and the west-end of the rockes (which men do call the Paternollers) lie north and by west and south and by east 5 leagues asunder, to the southwardes of them men do saile into Maelstrand. Upon the coast betwixt Farder and Maelstrand, is almost every where good ankorground in 35, and 40 fathom.



great rocks, but on the north side all small rocks. When you come within the rocks about the poynt of the northland, there you may ankor in 15 or 16 fathom, there is good ankor-ground. From Calf-sound you may run up to the southwards, through within the rock unto the rivier of Nilus.

Four leagues southsoutheast from Calf-sound, lieth the lland Winneu to the southwards of it goeth in the channell of Nilus or Gottenbergh, which is a large and broad fount, lying in n. n. e. in 8, 9, and 10, fathoms, you must leave Winneu on the larboard side, and runne in betwixt the poynt of the main land, called Kalderhead, and the lland little Denmark, and then in alongft by the mainland on the southside untill past Elsburch to Gottenburgh, it is there all cleane and cleare without any danger that might hurt you.

Gotten-
burgh.

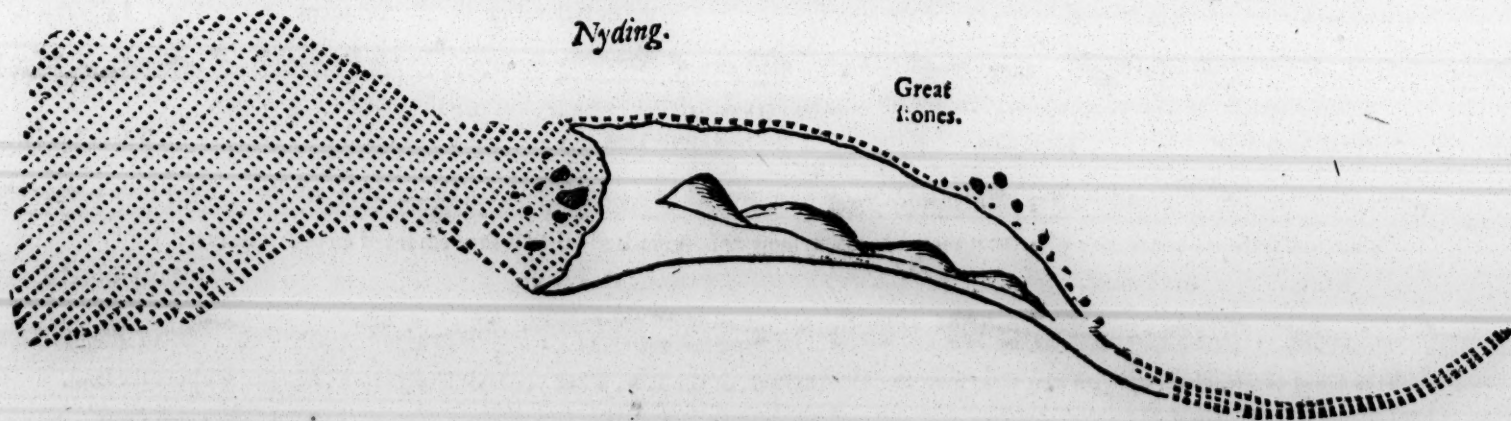
You may also saile into the northwards of Winneu, then you must leave Winneu, and also some long rocks on the starboard side, and the through lland or little Denmark, on the larboard side, & then in alongft by the point of the main land, on the south side, as is before said.

Male-
found.

Two leagues southsoutheast from Winno lye Malesound and Confback: Malesound is a rough lland, which you may saile roundabout in seven or 8 fathom, under it is also good road. Two cables length westnorthwest from Malesound, lyeth a suncken rock under water, and also one even with the water, a bow shot from the land, whereupon standeth a Warder.

Eastnortheast from Malesound lyeth the haven of Conf-back, there stand two great Warders, each upon a rock close to the land, betwixt them lyeth in the haven, it is a fayre haven, ten fathom deep, and good ankor-ground, when you come about the low point you shall see Confback lye to the northwards of you.

Conf-back



From Malesound southwest and southwest and by west, a great league to seawards, lieth the fowle and dangerous rock Nyng or Nijding: The land upon Nyng is about a halfe league long. The riffe on the north end runnes till about a league on the land northeast, and is halfe a league broad, wholly riffe, with sharpe stones. Upon some places 8, 7, 5, and 4 foot water. The taile, which shooteth southerly downe, is narrow, and runneth from the land northeast about 2 leagues: There

upon is 5, 4, and 3 foot water. A league and a halfe without Nynger-Riffe, northwest, men may stay upon 6, and 7 fathom. You may saile through betwixt Nyding and Malesound, or the mayn land, but it is there all shallow water. Upon Nyding is a fire-beacon, whereupon they make fire every night.

From Nyding to Watersbergen the course is S. E. 5 leagues, betwixt them (three leagues to the southwards of Malesound) lieth Monsterfount, that is a river or Sound, which

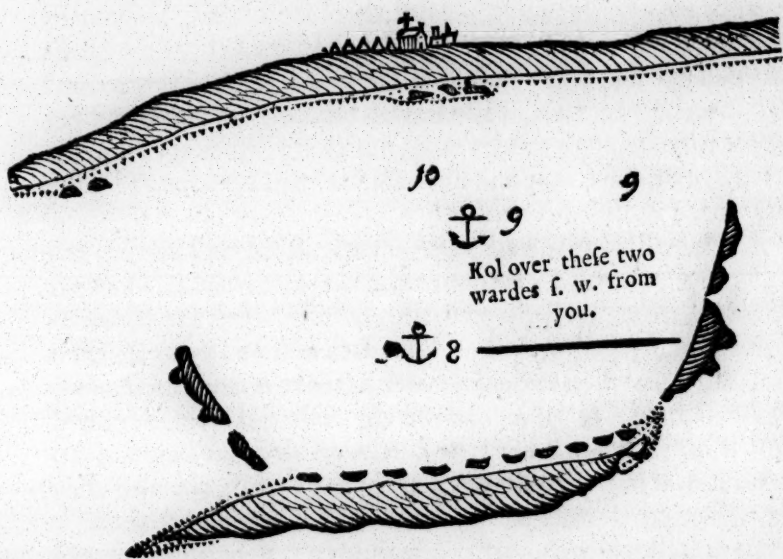
Monster-
fount.
Waters-
bergen.

which runneth up into the land, upon it lye some towne as Vlymenes, Horn, and Gofewater. From Monfterfoud three leagues to the fouthwards, lieth Watersbergen. For to fayl in there, you muft run in by the eaft land. At the point of the Iland which lyeth on the northweft fide before the haven, lieth a rock under water, and from the poynt where the caftle standeth upon, lieth alfo a funken rock, but which you muft avoid, and therefore run in amidft the channel, betwixt the foresaid Iland and the mayne land, where the caftle standeth upon the poynt, and anchor when you come within the point right againft the caftle in 4 or 5 fathom. For to faile into Watersbergen by markes, you muft bring Old boey to the N. fide of the caftle, and goe on N. N. E. there lieth a rock even with the water, which you muft leave on the ftarboard fide, and anchor right againft the caftle in 4 or 5 fathom as before is faid.

Two leagues to the fouthwards of Watersbergen lieth the river of Valckenburgh. On the north fide of the Rivers mouth lieth an Iland, called Murupting, and three leagues to the S. wards of it, lieth an Iland called Tullo, betwixt that Iland and Valckenburgh, within the land, lieth a high hill, called Haver, being whito to fee to, as if it were fandy Land: fea fearing men doe name it yong Coll, becaufe of the likenesse of height and fafhion, which it had like Col, and fometimes it is miftaken for Coll.

Three leagues eaftwards from Tullo, lieth Helmftee upon a river, but there can go in no fhips, but onely huyes & boates.

Two leagues fouthwards from Helmftee lieth the little towne, or little caftle, called Laholm, there goeth alfo a little river into the land. A league weftwards from Laholme lieth Bosftadt, thefe places lye in a great bay.



Swedereur.

Three leagues to the weftwards of Bosftadt lyeth the Iland Swedereur, you may runne in behind it at both fides, for to anchor from the northwards, it is there large and broad for to goin: but from the north end of Swedereur shooteth of a little ledge of rocks, you muft runne alongft to the northwards off the rocks, that lye at the north end of Swedero, leaving them on the ftarboard fide, and anchor behinde the Iland, betwixt the great and little rockes in seven fathem, thwart of the little white church of Turcko, fo that the greate rock with the two wardes at the fouth end be fouthweft from you, and Col stand over the foresaid Rock, there it is beft lying, and there you are landlockt for all winds. If you wil run out againft the fouthwards of it, then leave the two rockes with the Warders on the ftarboard fide, and runne boldly clofe about by them, towards Coll.

He that cometh of from Anout, and by reafon of foutherye windes can not run a weather Col, let him goe from Col northeaft and by north towards Swedereur, and runne clofe about by the two foresaid rockes with the Warders, at the fouth end of Swedereur, untill he come behind the Iland, and anchor, as is before fayd, there it is foft ground. A north winde bloweth there open in.

From Swedereur to Coll the courfe is fouthweft and by fouth, betwixt both lyeth a greate baye, upon which lieth that little thowne Engelholme, where men alfo may ride.

For to fayl from the Scaw to Coll.

From the Riffe of the Scawe to the Iland Lefou, the courfe is fouthfoutheaft, but the pointe of the Riffe and the Trindell lye due foutheaft and northweft eight leagues a funder.

The Iland Lefou is compaffed round about with foule Dwaelgrounds, riffe and fands, that lye off. From the fouth-eaftend where the Church ftands upon, lyeth of fuch a great

riffe or fould from the fhore, that is about 3 leagues from the land to the fouthwards of it, it is not deeper then two fathome, there under it you may make road for a fouthfoutheaft winde. Likewise from the S. weft point, lyeth of fuch a great fhowld, that when the foresayd flatt church is eaft, and eaftnortheaft from you, you can not come neare the land within 3 leagues. But the north end you may come fo neare, that you may have rode under it for a fouthery and Southeaft winde, in 3, 4, 5, 6, and 7 fathom, the church being about fouth from you.

From the northeaft end lyeth off alfo a riffe right towards the Trindell, which you may found about, when you Sayle through betwixt Lefou, and the Trindell, which is te nearer Lefou the fhowlder, and the nearer the Trindell the deeper. Clofe by the Trindell ou the Inner fide or weft fide, it is deepe five and fix fathom.

The Trindell is a ftony Sand-plate, three cornerd, and fomething long of fafhion, it is no more then four foot deep, and about two Akers of land great, and lyeth moft alongft the fare-waye, lying from the Northeaft end of Lefou Northeaft, or a little more eafterly about 3 leagues diftant. On the northeaft fide of the Trindell lyeth allways a great buy, whereby you may know it a farre of.

When the poynt of the Scaw is northeaft and by weft about a league from you, there it is feventeen and eightene fathom deep, but when the poynt lyeth weft, and weft and by fouth from you, about a league there it is 4 or 35 fathom deep.

But he that commeth faylinh about the Scaw, and runneth without the riffe in tenne, eleven, or twelve fathom, and goeth on from thence Southeaft, or Southfoutheaft, keepeth a long while ftill, the depth of fifteen and fixteen fathom, at leaft the fpace of three leagues, before he gette twenty, or five and twenty fathom. When as that you beginne to get againe fhowlder water of tenne, eight, seven, and fix fathom, that goeth then through within the Trindell. When that you fhall meete with the foresayd depth of the fhowlding, and faile yet further on Southfoutheaft, then you muft be very carefull to ufe your lead often, becaufe of the foresaid fhowld, which lyeth of from the northeaft end of Lefou towards the Trindell, you may run over it (as is faid) in five, foure, and fo well (in the narrowe) in three fathom. When the northeaft point of Lefou beginneth to come Southfouthweft from yoy, then you come on againft the riffe or fhowld, but when the point is Southweft from you, then you are over the fhowldeft off the riffe. When the weft end of Lefou is Southweft, and the church Southweft and by fouth from you, then you are about thwart of the buye of the Trindell.

Four leagues fouth and by weft from the Scaw lye the fmal- Helmes, not far from the fhore, that are three little Ilands, the fouthermoft the Iuttes doe call the Deyen or the Dee, the middlemoft Holmes, and the northermoft Grufholme by them lyeth yet another little Iland. You may faile through between the fouthermoft and the middlemoft, but then you muft runne neareft the fouthermoft, trough betwixt them is four fathom water.

Under the Helmes is good road for foutheaft, fouthfoutheaft and fouthery windes, He that will go to anchor under them, comming from the Scaw, muft runne to the ftand in three fathom, and runne fo alongft by it, in betweene the ftand and the Helmes, untill that he be within the rockes, there he may anchor, or alfo well runne through alongft by the footftand in 3 fathom. When the rockes of the Helms are eaft, and eaft and by north from you, there is the roade in 4 fathom, and 4 fathom and a half. The beft road for to ly under the Helms with fmall fhips, is betwixt the fouthermoft and middle moft little Iland, fomewhat nearer the main land then the Ilands: but for great fhips it is beft to lye by the Grufholme.

He that will not lye fo far within the Helmes, may alfo anchor farther out under the high land of Lacklou, fo that the Helms be Southeaft from him, in four, five, or seven fathom, there it is alfo very good lying for South and Southfoutheaft windes, in clean ground, of fmall white and black fand.

Betwixt the Scawe and the Helmes in the farewaye it is deepe eighteen, fixteen, and fifeene fathom. Betwixt the Helmes and the maine land, there is at the fhowldeft three fathom water. When you come from the northwards through betwixt them untill you come thwart of the fouth end of the rockes, there runneth off a little riffe from the Helmes towards the ftand, where the great ftones lye called Bourfer riffe, but keeping in three fathom, you can not take hurte of that riffe. You may well run out againe by that fouth end towards Zeabuy. So that you may fayl round about the Helmes with fhippes that are not of very great draughts.

Betwixt the Helmes and Lefou, a good wayes from the

N

Helmes

Helmes, it is 20 and 25 fathom deep, soft ground, but one league from the Helme lye some rocks or showlds, where of you must take heed.

Dwael-grounds. To the westwards of Lefou lye the Dwaelgrounds, to the northwards of the foresaid riffe, that lyeth off from the S. W. point of Lefou, where the flat church standeth upon, which are very uneven of three, four, five, and fixe fathom deep. Of these and more other showlds and uneven grounds, betwixt Lefou & Zeabuy, read the description off the norther part of the Belt.

Rocks betwixt Lefou and the Holms. About a league northnorthwest from the west end of Lefou, S. S. E. somewhat southerly from the point of the Scaw, and east south east from the little Helmes, there lye two or 3 little low llands or rocks, a little above water; betwixt these Holmkens, and the Helms, it is twenty fathom, but betwixt these Holmkens and Lefou 5 fathom deep, to the northwards off them is farre flat, foure and five fathom deepe sandground.

If you will sayl by night off from the Helmes or from the high land of Lacklie towards Lefou with a southwest or southsouthwest winde, then sayle no nearer because of these little llands and showlds then southeast and by east, with that course you shall runne over those showlds or flats (lying to the northwards from the foresaide Holmkens) in six or seven fathom, afterwards it will be deeper again, nine, ten, and twelve fathom, go then on eastsoutheast so long untill that the east end of Lefou be S. W. from you. When that east end beginneth to come south and by west from you, then you come on against the flat, or rif, which shooteth off from the northeast end of Lefou towards the Trindell. It doth showld up from 14, 12, and 10 fathom, unto 8, 6, and 4, and also to 3 fathom. If you be somewhat near to Lefou, the three fathom lasteth a good while, and then it will be again deeper, four, six, tenne and fiftene fathom, and then verie deep. When that foresaid northeast end of Lefou is S. W. from you, then you are cleare of that flat. The Helmes and the Trindel lie east and by south and west and by north seven leagues asunder.

For to sail within the Trindel. When you come from the Scaw with a southwest or westsouthwest winde, and that you wil sail through within the Trindel, that is, betwixt the Trindel and Lefou, it is best that you goe such a course, that you may make your wayes good south east and by south, and then you shal run alongst about the midst of the channell, through betwixt the Trindel, and the foresayd low rocks, (which lye northnorthwest of from the north point of Lefou, and southsoutheast from the point of the Rif of the Scaw.) At the deepest in this farewaye, betwixt the Scaw and Lefou, it is 23 and 24 fathom, being past over that, you shal come against a banck of eight, seven and six, and also into five fathom, and then you shal be about due west, or a little more northerly or southerly from the buye upon the Trindel. Afterwards it will be again deeper, if you be in the right fareway, to wete, 7, 8, 10, and also wel twelve fathom.

For not to sail within the rif, or the northeast point of Lefou, it is good to run then somewhat more easterly, to wete, southeast, or southeast and by east, untill you come against the foresayd rif that lyeth off from the northeast point of Lefou, which you may sound, and so runne about by it in five, four, and also three fathom. When the northeast point of Lefou, (that is the point with hommocks) is sout and by west from you, then you come against the rif, and when that point is S. S. W. from you, then you are right thwart of the rif, but when the point is S. W. from you, then you shall be past and cleare of the rif. Being gotten about it towards Anoute, it will be deepe thirtie, five and thirtie and also forty fathom.

He that commeth by night about the Trindell, must not spare his lead, on the outer side, that is on the east side off the Trindly you may not come no neare it by night, then nine or tenne fathom, and then you shall not befarre off from it.

When you saile close alongst without the Trindel in cleare weather, and that you stand without board, upon the bendes of the shippe with your feet by the water, then you can even see Lefou. If that then in cleare weather standing so without the ship, you can not see Lefou, when you are about thwart of the Trindle then you runne farre enough alongst without the Trindle.

Depths betwixt Anout and Lefou. The Trindle and the riffe of Anout lye northwest and south east or as some say southsoutheast and northnorthwest, nine or tenne leagues asunder. Betwixt Anoute and Lefou in the right farewaye it is five and twentie fathom deep, but to the westwards of it, to wit, right betwixt the llands Anout and Lefou it is should water, of seven and eight fathome, you may sayle there over these flats and showlds through betwixt Anout and Lefou into the Belt.

Anout is upon the west side very foule, and farre of to sea-

wards from it, lye many uneven dwaelgrounds, of two, three, and four fathome.

When you sail with a southwest or westerly winde from Lefou to Anout, and runne over the flat of Lefou in three or four fathome, you neede not saile on more easterly then southeast and by east, although it be by night, you shall with such winde and course run cleare enough of Anout. When as that you reckon to have the length of the riffe, goe then on southsoutheast and south and by east, for to sail a wether of Coll. But by day or when you can see about you, not more leewarly then southsoutheast. When you saile off from the foresaid point of Lefou to Anout with a southwest or westsouthwest winde, as is before said and make reckoning to come by night by Anout, then you can not doe better, as to goe eight, tenne, or twelve glasse, (according as the winde shall blow fresh) on southsoutheast, untill you come against the showlding of Anout and looke for the daye, that running not to far to leewards of the point off the riffe, you may the better gette a weather off Col. Likewise, when you come off from Coll with a southwest or southerly winde, and runne about a halfe league alongst without Coll, you neede not also saile more northerly, then northwest and by north, that goeth also a good wayes alongst to leewards off Anouts riffe, and so forth towards Lefou. But when you come with a northeast winde out off the Sound, or from Col, you must runne out close by Coll, if you will sail a weather off the riffe off Anout.

He that must lye by or turne to windwardes betwixt Lefou and Anout, and is bound for the Sound, let him keepe himselfe on the west side of the farewaie, when he is a league or two a wather of Lefou, upon those foresaid flattes, or fourne, fixe, and seven fathom, when as that he beginneth to come within a league or two off Anout, there it will be again deeper, but uneven the one cast at least a fathome more or lesse then the other, when that you shall begin to get that uneven ground off fiftene, twentie, and also thirtie fathom, then is Anout yet about three leagues south from you; comming neare Anout it will be verie uneven, at one time thirtie, and then soone againe fiftene, 17, and also 20 fathom.

If you will saile towards Lefou with a southwest winde, coming about the riffe off Anout from the southwardes, then goe not on more westerly then northwest. If you goe on more westerly, either westnorthwest, or northwest and by west, then you shall come soon upon the flatte betwixt Anout and Lefou, and shall finde first tenne, and then by little and little, 6, 5, and 4 fathom. When that with the northwest way you beginne to gette Lefou in sight, then it lieth high, that is, the west ende about westnorthwest, and the northeast ende, where the riffe lyeth off, about northnorthwest from you. When you come so neere to Lefou, that you can see the east end out off the toppe in cleare weather, about northwest from you, there it is thirtie, and 34 fathome deepe, that lasteth so long untill that the foresaid east pointe be southsouthwest from you, but when that point is southsouthwest from you, then you are right thwart or upon the pointe or showld off the rif, then you shal runne over there in three, 4, 5, Fathom: When that foresaid point commeth to be south and by west from you, then you are past and cleare of the riffe.

Depths betwixt Anout and Waesbergen. In the farewaye it is deepe one and twentie, two and twentie, and three and twentie fathome, betwixt them lyeth also a banck off ten, twelve, 14, and fiftene fathom. When the northermost high hil of Waesbergen is northeast from you, then the pointes off Anoutes riffe is southwest from you: but when that hill is northeast and by east from you, and that you be somewhat nearer Norway then the riffe, then you are upon the banck. When you come upon it by night, then goe on south, or south and by east, according as the winde shall bee, and then you shall get againe deeper water. There lieth yet another banck betwixt the riffe of Anout and Valckenburgh, which lyeth alongst unto Haland, which at some places is not deeper then eight fathom. When the pointe off the riffe is about south and by east, and the high land off Anoute is about S. and by west from you 4 leagues, there lyeth also a banck off 14 or 15 fathom.

The riffe off Anout lyeth off from the northeast point off Anout about eastnortheast a league and a halfe into sea, and at the end lieth drye above water, which is exceeding steepe and needle too. The north side (when you come from the northwards or the westwards) you may sound, and runne alongst by it in 17, or 18 fathome: but comming from the southwards, you can not (in no wise) come neare it by your lead, for on the south side close to the Rif, it is thirtie and five and thirtie fathome deep.

On the north side off the riffe, you may rickor at many places

places in tenne, eleven twelve, and thirteen fathom. When you anchor in eleven, twelve or thirteene fathom, so that the Fire-beacon be southeast and by south, and the high land of Anout, which is the west end, about southwest and by west from you, then lieth the outermost end of the riffe east and by north from you, there is very good lying for eastsoutheast, southeast, south, and southsouthwest windes. When you set sayle from thence, and are bound to the Sounde, then you may boldly without feare (either by night or darke weather) sail alongst by the riffe in sixteen, seventeen or eightene fathom, untill thwart of the ende, keeping in such depth you can take no hurt of it. Comming by the end, it is four and twenty and five and twenty fathom deepe, but when you com about the point, and begiune to goe on southsoutheast, then you have presently close to the riffe no ground in thirtie and five and thirtie fathom. The riffe of Anout and Col lye one from the other south-east and northwest about tenne leagues asunder. In cleare weather you may easily see from belowe both Col and Anout, when you are betwixt them both. For to saile from the riffe to the Sound with a westsouthwest winde, you neede not saile nearer with a ship that saileth wel, then southsoutheast, with that course you shall sail farre enough a weather of Col. Comming neare the coast of Zealand, that you may found in fourteene, twelve, tenne, and eight fathome deepe,

Betwixt Anout and Zealand, in the fareway it is eightene and twentie fathom deepe. Betwixt Anout and Zealand fifteen and sixteen fathom, but in the fareway betwixt Anout and Coll, it is deepe twentie, one and twentie, two and twenty, and three and twentie fathom. To the southwards off the westwardes of it, it is showlder, to wete, nineteene, eightene, and also wel fourteene, thirteene, and 12 fathom, according as you come to the westwards, but towards Norway it is deeper, to wete, four and twenty, five and twentie, eight and twentie and also thirtie fathom, whereby you may perceive wether you be nearest the Norway side to the eastwards of the fareway or to the westward.

About northwest from Col four leagues, and southeast and by east from Anout, there lyeth a banck of nine, tenne and twelve fathom.

About east and by south from Anout, so far that you can not well see it from beneath, but you may see out of the top, and northwest from Coll, there lyeth also a banck off sixteene fathom, grosse sand ground, as if it were ground of the riffe.

South and by east about eight leagues from the point off Anouts riffe, southeast and by south from the south end off Anout, and west and by north from Coll about 5 leagues, lye the Lowsegrounnes, upon which is no more then eight foot water. He that commeth off from Anout riffe, being bound for the Sound, and goeth not more southerly then southsoutheast, shall not sayle within these grounds, but with a south and by east course he shold fall with them. He that cometh out of Sound, being bound towards Anout, should (with a W.N.W. course of from the Sound) also saile within the same therefore he that is bound with a bare winde from Anout to the Sound, or from the Sound to Anout, must be carefull thereof.

The Island Hafelin lyeth from Anouts riffe south tenne leagues distant, and from Coll southwest and by west eight leagues, which is on the north side or outer side verie foule, full of riffes and shoulds, but on the south side or inner side towards Zealand it is indifferent clean, so that you may wel have roade there. From the east end of Hafelin lieth of a riffe northnorth-east and northeast and by north towards Norway three leagues into sea, untill within a league near to the Lowsegrounnes: he that must turne to windwards here, with southerlye or

northerly windes, and runneth somewhat far over westwards into the bay, must be very carefull, and take heed there of, because it is there abouts very uneven of depths, and uneven grounds, and therefore you can not well come neare then by your lead, but the Coast of Zealand you may come neare in six or seven fathom by your lead.

If it shold happen that you must lye by, in the Scawe reach in long darke nights or mistie whether, then observe these directions following: If you be betwixt the Scawe and Lefou, then you may keepe your self well bouldly to the southwards or westwards, but use the lead much: about the Helmes and the Scawe you may come neare the shoare into ten, 12, or 15, fathom, before you need the cast about. If you be by your reckoning thwart of Lefou, you may come neare it in ten or 15 fathom. But if you be betwixt Lefou and Anout, there you may runne upon the flats in five, six, seven, eight or tenne fathom. If you be betwixt Anout Hafelin and Coll, there you may runne to the southshoare in fifteene and sixteene fathom, but betwixt Hafelin and Zealand in ten or twelve fathom.

It is best in anie wise to keepe you rather to the southshoare, then to the Norway side, but you must be verie carefull of your lead, and use it very much.

Of the tydes and courses of the streames.

In the Scawe reach, betwixt Maelfstrand and Watersbergen the streame goeth most still with the winde and it rippleth there sometimes in some places, as if there were showlds, this you may finde in calme weather, if you let a lead sincke to the ground.

By the Scawe the streame commeth most commonly failling out at the Belt towards the land of N.E. especially when the winde hath blown a while out of the east or N.east, and runneth alongst by the Norway to the Northwardes.

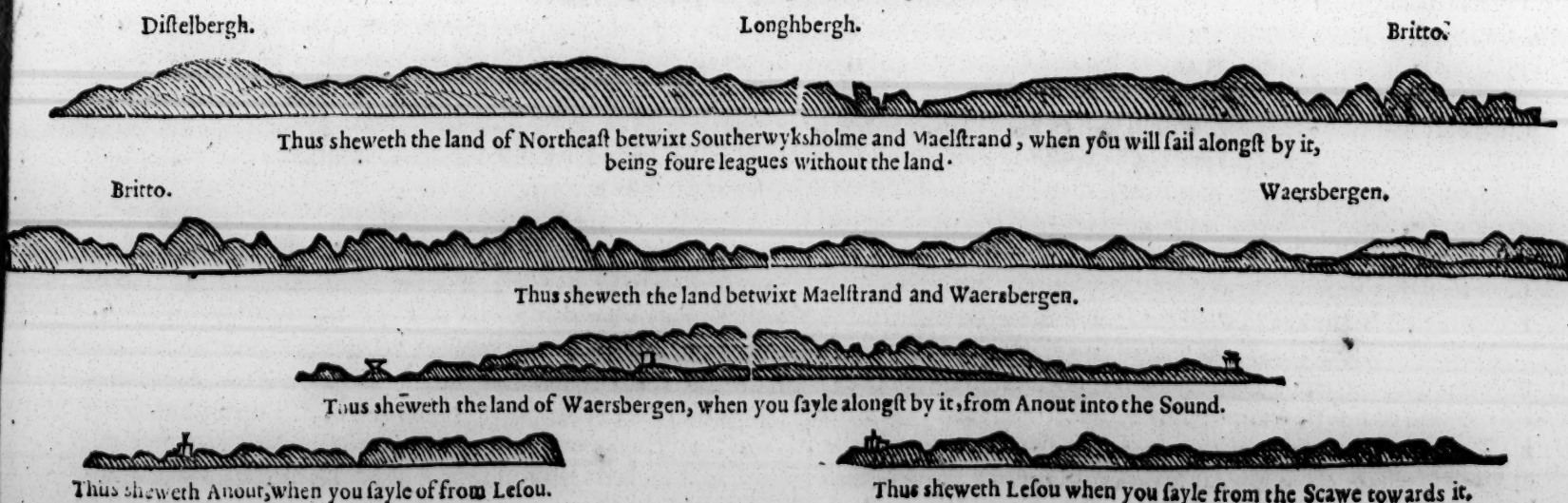
Men comming of from Anout, that wil sayle by night with a westerly winde, towards the Scawe: or comming from the westwards about the Scaw, with a southerly wind, being bound for the Sound, might soon be carried with this current under Norway, a good while before they shold thincke a feare of it. Of this current read further in the first booke.

In this fareway betwixt the Scawe and the Sound, and then from the Sound untill about Easterborne, it is exceeding necessarie, that a Pilot (or he to whom the charge is committed) be verie carefull in looking out, and be very vigiland, that he may avoyde the multitude of daungers, of showldes and riffes lying there: the skilfullest and best experienced of all hath there enough to doe.

Courses and Distances.

From Akerfoune to Southerwycksholme southeast and by east	5 leagues
From Southerwycksholme to Harmenshead southsoutheast	4 or 5 leagues
From Harmenshead to the west end of Paternosters	5 leagues
From the west end of the Paternosters to the Maelfstrand the course is eastnorth east	2 leagues
From Maelfstrand to Winneu southeast	5 leagues
From Winneu to Maelfstrand southsoutheast about	2 leagues
From Maelfstrand to Waersbergen southsoutheast	5 leagues
From Waersbergen to Tuyo southeast	5 leagues
From Tuyo to Laholme southeast and by east	5 leagues
From Laholme to the point of Turko behinde Swedereur the course is west-southwest	3 leagues
From Turko to Enghelholme southeast	4 leagues
From Enghelholme to Coll west	4 great leagues
From Maelfstrand to Nyding southsoutheast	8 or 9 leagues
From Maelfstrand to Nyding the course is southwest and southwest and by west a league and an half	
From Nyding to Waersbergen southeast about	5 leagues
From Waersbergen to Coll south and by east	12 leagues
From the south end of Swedero to Coll southwest	4 leagues
From the riffe of the Scaw to Maelfstrand eastnorth east	13 leagues
From the riffe of the Scaw to Nyding southeast and by south	16 leagues
From the Riffe of the Scawe to Waersbergen eastsoutheast	23 leagues
From the Riffe of the Scawe to Coll alongst without the Trindell S.	30 leagues
From the Riffe of the Scawe to Lefou southsoutheast	8 leagues
From the Riffe of the Scawe to the Trindell due southeast	8 leagues
From the Trindell to Anouts riffe southeast, or as some will saye somewhat more southerlye	9 or 10 leagues
From Anouts riffe to Coll it is right southeast	10 leagues
From Anouts riffe to Hafelin south	10 leagues
From Coll to Hafelin southwest and by west	8 leagues
From Coll to the northernmost out pointe of Zealand southwest	5 leagues

How these Lands doe shew themselves at sea.



Helmes, it is 20 and 25 fathom deep, soft ground, but one league from the Helme lye some rocks or showlds, where of you must take heed.

Dwael-
grounds.

To the westwards of Lefou lye the Dwaelgrounds, to the northwards of the foresaid riffe, that lyeth off from the S. W. point of Lefou, where the flat church standeth upon, which are very uneven of three, four, five, and sixe fathom deep. Of these and more other showlds and uneven grounds, betwixt Lefou & Zeabuy, reade the description off the norther part of the Belt.

Rokes
betwixt
Lefou and
the Holms.

About a league northnorthwest from the west end of Lefou, S. S. E. somewhat southerly from the point of the Scaw, and east southeast from the little Helmes, there lye two or 3 little low llands or rocks, a little above water; betwixt these Holmkens, and the Helms, it is twenty fathom, but betwixt these Holmkens and Lefou 5 fathom deep, to the northwards off them is farre flat, foure and five fathom deepe sandground.

If you will sayl by night off from the Helmes or from the high land of Lacklie towards Lefou with a southwest or southsouthwest winde, then sayle no nearer because of these little llands and showlds then southeast and by east, with that course you shall runne over those showlds or flats (lying to the northwards from the foresaide Holmkens) in six or seven fathom, afterwards it will be deeper again, nine, ten, and twelve fathom, go then on eastsoutheast so long untill that the east end of Lefou be S. W. from you. When that east end beginneth to come south and by west from you, then you come on against the flat, or rif, which shooteth off from the northeast end of Lefou towards the Trindell. It doth showld up from 14, 12, and 10 fathom, unto 8, 6, and 4, and also to 3 fathom. If you be somewhat near to Lefou, the three fathom lasteth a good while, and then it will be again deeper, four, six, tenne and fiftene fathom, and then verie deep. When that foresaid northeast end of Lefou is S. W. from you, then you are cleare of that flat. The Helmes and the Trindell lie east and by south and west and by north seven leagues asunder.

For to sail
within the
Trindell.

When you come from the Scaw with a southwest or westsouthwest winde, and that you wil sail through within the Trindell, that is, betwixt the Trindell and Lefou, it is best that you goe such a course, that you may make your wayes good south-east and by south, and then you shal run alongst about the midst of the channell, through betwixt the Trindell, and the foresayd low rocks, (which lye northnorthwest of from the north point of Lefou, and southsoutheast from the point of the Rif of the Scaw.) At the deepest in this farewaye, betwixt the Scaw and Lefou, it is 23 and 24 fathom, being past over that, you shal come against a banck of eight, seven and six, and also into five fathom, and then you shal be about due west, or a little more northerly or southerly from the buye upon the Trindell. Afterwards it will be again deeper, if you be in the right fareway, to wete, 7, 8, 10, and also wel twelve fathom.

For not to sail within the rif, or the northeast point of Lefou, it is good to run then somewhat more easterly, to wete, southeast, or southeast and by east, untill you come against the foresayd rif that lyeth off from the northeast point of Lefou, which you may sound, and so runne about by it in five, four, and also three fathom. When the northeast point of Lefou, (that is the point with hommocks) is sout and by west from you, then you come against the rif, and when that point is S. S. W. from you, then you are right thwart of the rif, but when the point is S. W. from you, then you shall be past and cleare of the rif. Being gotten about it towards Anoute, it will be deepe thirtie, five and thirtie and also forty fathom.

He that commeth by night about the Trindell, must not spare his lead, on the outer side, that is on the east side off the Trindell you may not come no neare it by night, then nine or tenne fathom, and then you shall not befarre off from it.

When you saile close alongst without the Trindell in cleare weather, and that you stand without board, upon the bendes of the shippe with your feet by the water, then you can even see Lefou. If that then in cleare weather standing so without the ship, you can not see Lefou, when you are about thwart of the Trindell then you runne farre enough alongst without the Trindell.

Depths
betwixt
Anout and
Lefou.

The Trindle and the riffe of Anout lye northwest and south-east or as some say southsoutheast and northnorthwest, nine or tenne leagues asunder. Betwixt Anoute and Lefou in the right farewaye it is five and twentie fathom deep, but to the westwards of it, to wit, right betwixt the llands Anout and Lefou it is should water, of seven and eight fathome, you may sayle there over these flats and showlds through betwixt Anout and Lefou into the Belt.

Anout is upon the west side very foule, and farre of to sea-

wards from it, lye many uneven dwaelgrounds, of two, three, and four fathome.

When you sail with a southwest or westerly winde from Lefou to Anout, and runne over the flat of Lefou in three or four fathome, you neede not saile on more easterly then southeast and by east, although it be by night, you shall with such winde and course run cleare enough of Anout. When as that you reckon to have the length of the riffe, goe then on southsoutheast and south and by east, for to sail a wether of Coll. But by day or when you can see about you, not more leewardy then southsoutheast. When you saile off from the foresaid point of Lefou to Anout with a southwest or westsouthwest winde, as is before said and make reckoning to come by night by Anout, then you can not doe better, as to goe eight, tenne, or twelve glasses, (according as the winde shall blow fresh) on southsoutheast, untill you come against the showlding of Anout and looke for the daye, that running not to far to leewards of the point off the riffe, you may the better gette a weather off Coll. Likewise, when you come off from Coll with a southwest or southerly winde, and runne about a halfe league alongst without Coll, you neede not also saile more northerly, then northwest and by north, that goeth also a good wayes alongst to leewards off Anouts riffe, and so forth towards Lefou. But when you come with a northeast winde out off the Sound, or from Coll, you must runne out close by Coll, if you will sail a weather off the riffe off Anout.

He that must lye by or turne to windwardes betwixt Lefou and Anout, and is bound for the Sound, let him keepe himselfe on the west side of the farewaie, when he is a league or two a wather of Lefou, upon those foresaid flattes, or fourne, sixe, and seven fathom, when as that he beginneth to come within a league or two off Anout, there it will be again deeper, but uneven the one east at least a fathome more or lesse then the other, when that you shall begin to get that uneven ground off sixtene, twentie, and also thirtie fathom, then is Anout yet about three leagues south from you, comming neare Anout it will be verie uneven, at one time thirtie, and then soone againe fiftene, 17, and also 20 fathom.

If you will saile towards Lefou with a southwest winde, coming about the riffe off Anout from the southwardes, then goe not on more westerly then northwest. If you goe on more westerly, either westnorthwest, or northwest and by west, then you shall come soon upon the flatte betwixt Anout and Lefou, and shall finde first tenne, and then by little and little, 6, 5, and 4 fathom. When that with the northwest way you beginne to gette Lefou in sight, then it lieth high, that is, the west ende about westnorthwest, and the northeast ende, where the riffe lyeth off, about northnorthwest from you. When you come so neere to Lefou, that you can see the east end off the toppe in cleare weather, about northwest from you, there it is thirtie, and 34 fathome deepe, that lasteth so long untill that the foresaid east point be southsouthwest from you, but when that point is southsouthwest from you, then you are right thwart or upon the pointe or showld off the rif, then you shal runne over there in three, 4, 5, fathom: When that foresaid point commeth to be south and by west from you, then you are past and cleare of the riffe.

Betwixt Anout and Waesbergen in the farewaye it is deepe one and twentie, two and twentie, and three and twentie fathome, betwixt them lyeth also a banck off ten, twelve, 14, and sixtene fathom. When the northermost high hil of Waesbergen is northeast from you, then the pointes off Anoutes riffe is southwest from you: but when that hill is northeast and by east from you, and that you be somewhat nearer Norway then the riffe, then you are upon the banck. When you come upon it by night, then goe on south, or south and by east, according as the winde shall bee, and then you shall get againe deeper water. There lieth yet another banck betwixt the riffe of Anout and Valckenburgh, which lyeth alongst unto Haland, which at some places is not deeper then eight fathom. When the pointe off the riffe is about south and by east, and the high land off Anoute is about S. and by west from you 4 leagues, there lyeth also a banck off 14 or 15 fathom.

The riffe off Anout lyeth off from the northeast point off Anout about eastnortheast a league and a halfe into sea, and at the end lieth drye above water, which is exceeding steepe and needle too. The north side (when you come from the northwards or the westwards) you may sound, and runne alongst by it in 17, or 18 fathome: but comming from the southwards, you can not (in no wise) come neare it by your lead, for on the south side close to the Rif, it is thirtie and five and thirtie fathome deep.

On the north side off the riffe, you may rickor at many places

Road un-
der Anout
riffe.

places in tenne, eleven twelve, and thirteen fathom. When you anchor in eleven, twelve or thirteene fathom, so that the Fire-beacon be southeast and by south, and the high land of Anout, which is the west end, about southwest and by west from you, then lieth the outermost end of the riffe east and by north from you, there is very good lying for eastsoutheast, southeast, south, and southsouthwest windes. When you set sayle from thence, and are bound to the Sounde, then you may boldly without feare (either by night or darke weather) sail alongst by the riffe in sixteen, seventeen or eightene fathom, untill thwart of the ende, keeping in such depth you can take no hurt of it. Comming by the end, it is four and twenty and five and twenty fathom deepe, but when you com about the point, and begiune to goe on southsoutheast, then you have presently close to the riffe no ground in thirtie and five and thirtie fathom. The riffe of Anout and Coll lye one from the other south-east and northwest about tenne leagues asunder. In cleare weather you may easily see from belowe both Col and Anout, when you are betwixt them both. For to saile from the riffe to the Sound with a westsouthwest winde, you neede not saile nearer with a ship that saileth wel, then southsoutheast, with that course you shall sail farre enough a weather of Col. Comming neare the coast of Zealand, that you may found in fourteene, twelve, tenne, and eight fathome deepe,

Depths
betwixt
Anout riffe
and the
Sound.

Betwixt Anout and Zealand, in the fareway it is eightene and twentie fathom deepe. Betwixt Anout and Zealand fifteen and sixteen fathom, but in the fareway betwixt Anout and Coll, it is deepe twentie, one and twentie, two and twenty, and three and twentie fathom. To the southwards off the westwardes of it, it is showlder, to wete, nineteene, eightene, and also wel fourteene, thirteene, and 12 fathom, according as you come to the westwards, but towards Norway it is deeper, to wete, four and twenty, five and twenty, eight and twenty and also thirtie fathom, whereby you may perceive wether you be nearest the Norway side to the eastwards of the fareway or to the westward.

Divers
Bancks.

About northwest from Col four leagues, and southeast and by east from Anout, there lyeth a banck of nine, tenne and twelve fathom.

About east and by south from Anout, so far that you can not well see it from beneath, but you may see out of the top, and northwest from Coll, there lyeth also a banck off fixteene fathom, grosse sand ground, as if it were ground of the riffe.

Lowfe-
grounds.

South and by east about eight leagues from the point off Anouts riffe, southeast and by south from the south end off Anout, and west and by north from Coll about 5 leagues, lye the Lowsegrounides, upon which is no more then eight foot water. He that commeth off from Anout riffe, being bound for the Sound, and goeth not more southerly then southsoutheast, shall not sayle within these grounds, but with a south and by east course he should fall with them. He that cometh out of Sound, being bound towards Anout, should (with a W.N.W. course of from the Sound) also saile within the same therefore he that is bound with a bare winde from Anout to the Sound, or from the Sound to Anout, must be carefull thereof.

Hafelin.

The Island Hafelin lyeth from Anouts riffe south tenne leagues distant, and from Coll southwest and by west eight leagues, which is on the north side or outer side verie foule, full of risses and shoulds, but on the south side or inner side towards Zealand it is indifferent clean, so that you may wel have roade there. From the east end of Hafelin lieth of a riffe northnorth-east and northeast and by north towards Norway three leagues into sea, untill within a league near to the Lowsegrounides: he that must turne to windwards here, with southerlye or

northerly windes, and runneth somewhat far over westwards into the bay, must be very carefull, and take heed there of, because it is there abouts very uneven of depths, and uneven grounds, and therefore you can not well come neare then by your lead; but the Coast of Zealand you may come neare in six or seven fathom by your lead.

If it should happen that you must lye by, in the Scawe reach in long darke nights or mistie whether, then observe these directions following: If you be betwixt the Scawe and Lefou, then you may keepe your self well bouldly to the southwards or westwards, but use the lead much: about the Helmes and the Scawe you may come neare the shoare into ten, 12, or 15, fathom, before you need the cast about. If you be by your reckoning thwart of Lefou, you may come neare it in ten or 15 fathom. But if you be betwixt Lefou and Anout, there you may runne upon the flats in five, six, seven, eight or tenne fathom. If you be betwixt Anout Hafelin and Coll, there you may runne to the southshoare in fifteene and sixteen fathom, but betwixt Hafelin and Zealand in ten or twelve fathom.

It is best in anie wise to keepe you rather to the southshoare, then to the Norway side, but you must be verie carefull of your lead, and use it very much.

Of the tydes and courses of the streames.

In the Scawe reach, betwixt Maelstrand and Watersbergen the streame goeth most still with the winde and it rippleth there sometimes in some places, as if there where showlds, this you may finde in calme weather, if you let a lead sincke to the ground.

By the Scawe the streame commeth most commonly failling out at the Belt towards the land of N.E. especially when the winde hath blown a while out of the east or N.east, and runneth alongst by the Norway to the Northwardes.

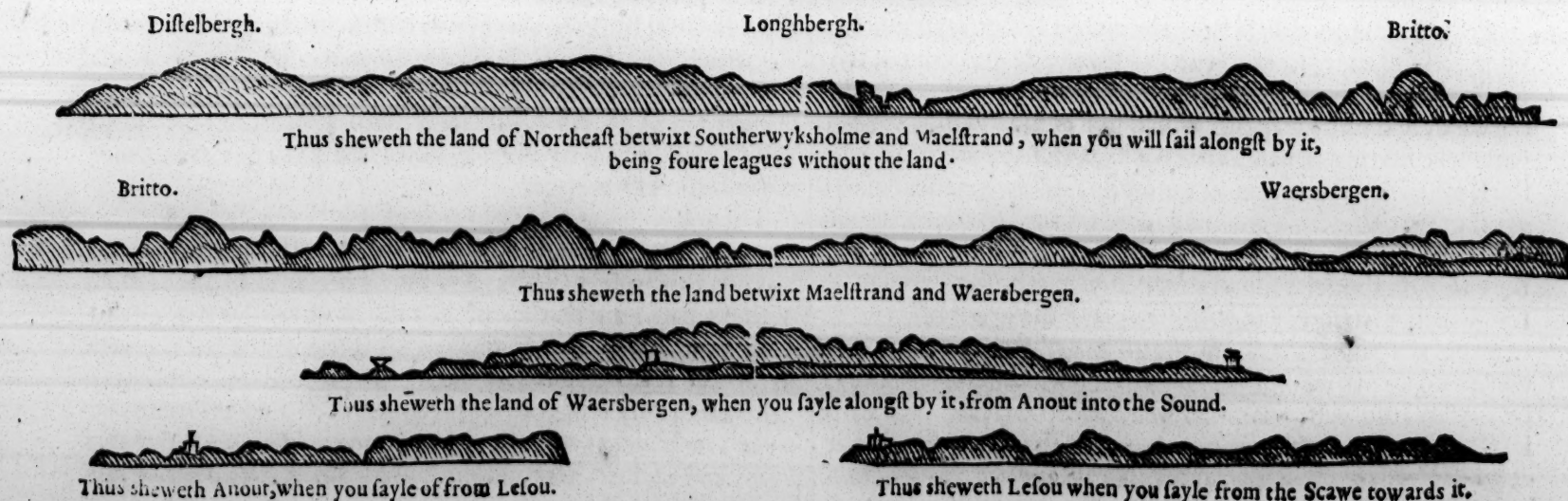
Men comming off from Anout, that wil sayle by night with a westerly winde, towards the Scawe: or comming from the westwards about the Scaw, with a southerly wind, being bound for the Sound, might soon be carried with this current under Norway, a good while before they should thincke a feare of it. Of this current read further in the first booke.

In this fareway betwixt the Scawe and the Sound, and then from the Sound untill about Falsterborne, it is exceeding necessarie, that a Pilot (or he to whom the charge is committed) be verie carefull in looking out, and be very vigiland, that he may avoyde the multitude of daungers, of showldes and risses lying there: the skilfullest and best expeienced of all hath there enough to doe.

Courses and Distances.

From Akerfoune to Southerwycksholme southeast and by east	5 leagues
From Southerwycksholme to Harmenshead southsoutheast	4 or 5 leagues
From Harmenshead to the west end of Paternosters	5 leagues
From the west end of the Paternosters to the Maelstrand the course is eastnorth east	2 leagues
From Maelstrand to Winneu southeast	5 leagues
From Winneu to Maelstrand southsoutheast about	2 leagues
From Maelstrand to Waersbergen southsoutheast	5 leagues
From Waersbergen to Tuylo southeast	5 leagues
From Tuylo to Laholme southeast and by east	5 leagues
From Laholme to the point of Turko behinde Swedereur the course is west-southwest	3 leagues
From Turko to Enghelholme southeast	4 leagues
From Enghelholme to Coll west	4 great leagues
From Maelstrand to Nyding southsoutheast	8 or 9 leagues
From Maelstrand to Nyding the course is southwest and southwest and by west a league and an half	
From Nyding to Waersbergen southeast about	5 leagues
From Waersbergen to Coll south and by east	12 leagues
From the south end of Swedero to Coll southwest	4 leagues
From the riffe of the Scaw to Maelstrand eastnorth east	13 leagues
From the riffe of the Scaw to Nyding southeast and by south	16 leagues
From the Riffe of the Scawe to Waersbergen eastsoutheast	23 leagues
From the Riffe of the Scawe to Coll alongst without the Trindle S.	30 leagues
From the Riffe of the Scawe to Lefou southsoutheast	8 leagues
From the Riffe of the Scawe to the Trindell due southeast	8 leagues
From the Trindell to Anouts riffe southeast, or as some will saye somewhat more southerlye	9 or 10 leagues
From Anouts riffe to Coll it is right southeast	10 leagues
From Anouts riffe to Hafelin south	10 leagues
From Coll to Hafelin southwest and by west	8 leagues
From Coll to the northernmost out pointe of Zealand southwest	5 leagues

How these Lands doe shew themselves at sea.



The sixth Demonstration,

In which Are seth forth the North coasts, between Akerfoud and Schaerfoud, and from Schaerfoud to Schuytenes.



Conings-
haven.

HE Longfoud is one of the fairest havens off all Norway, and lieth northnortheast from Jofferland distant one great league. Before old Longfoud lieth a high round rocke, whereupon standeth a great round Warder, for knowledge of this haven, Coninx-haven that is the southermost or westermost channell of the Longfoud, and goed in betwixt the westermost through point and Conings Yland, and then men run alongst to the eastwards off the Baers, which lieth off from the foresaid rough point. For to saile in there, you must run in amid channell: and ankor in the Coningshaven in 28 and 30 fathom.

The Nesse.

For to saile into the Nesse, that is on the north side behinde the eastermost point of Longfoud (you must run through betwixt the great rock, whereupon the Warder standeth, and the land of old Longfoud, leaving the foresaid rocks on the starboard side, and so alongst about that rough Yland, untill you come into the Nesse, which lieth behinde a chindle strand, there you shall lye under a chindle off rockes like red sand: There lye also some litle rockes thwarr of that chindle. This is a good handfoum haven, and light for to come into, there it is 24 and 25 fathom deep.

Stavange.

A league to the eastwards of the Nesse, or east point of the Longfoud, lieth Stavange, that are some out-rockes, where men may saile within on both side, to the eastwards of it lieth the foud of Laerwyck.

Laerwyck.

The Laerwyck is a great broad Sound, where are many Bights and Lade-places, where men may lye and lade Firretimber. From the east point lieth of a great rane of rocks a good wayes off southeast and by east into sea, and run in almost halfe the Sound, called the Laerwykes Swines, where of men must take heed. Within in this Sound it is flat water and should, so that farre within no great ships can lye afloat.

Farder.

From the Laerwyck unto the Iland Farder the course is east northeast foure leagues, betwixt them both lieth the litle towne Tonsbergen in a great Bight. And from Farder to the Iland

Bast.

Bast the course is north and by west five leagues, betwixt both lieth a fowle point. To the southwards of Bast lieth Markenboet, and the Bight of Asko, both to the northwards of Bast lieth Lowfoud.

Soenwater

From the Iland Farder to the Soen-water, the course is north, but from Bast north and by east. The Soen-water lieth in most north. Upon it lye many havens and lade places, most on the starboard side as you come in. First there is Mos-foud, a haven that goeth up to the eastwards, & then there is Wykeftee, which is a bight behind and Iland, afterward Shiphill, a sandbay and a very good road, that goeth so up alongst to the northwards into Anflo, and then it runneth about to the southwards into the Bottom.

Wyckflee.
Shiphill.

Copper-
wycke.

When you saile from Farder or Bast unto Soen-water, you shall meet with a red point, betwixt the Soen water and the Copperwycke. He that is bound into Soen-water must run alongst to the eastwards of it, but he that is bound into Copperwycke must goe up alongst to the westwards of it and leave it on the starboard side. When that you come within the Lams, you shall espie a litle Church upon the westland, there is the lade place of the Copperfleyke, you may sail up from thence to Brakenes. On the north or east side lieth Holmfoud, from Farder to the point of Roge the course is northnortheast 5 league. At the east end of Roge you may ankor, there is a plain strand, you may run through betwixt the Roge and the Calf, but ankor under Fletto, then you must run through within the two small rocks.

Roge.

The Sisters.

From Bast unto the Sisters the course is southeast five leagues. Behind the Sisters to the southwards of the point of Roge, lieth the haven of Elffang, distant from the Iland Farder northeast and east 5 leagues. When you come of from Farder, you must run through within the rocks, which lye within the Sisters, untill you come against the land, there you shall find a great gray rock, which you must leave on the larboard side, and the small rocks that lye there within on the starboard side, and then alongst about by the westland, & then the haven opens it self, which is narrow, and within flat and soft ground.

From the Naze (that is the southermost point of Norway on the north sea) westwards, the coast lieth somewhat alongst by the land of Leest, westnorthwest, but to the eastwardes off it (alongst without the rockes untill past the Iland Fleckerie) eastnortheast about tenne leagues. From thence along north-east unto the Longfoud about sixteen leagues. This coast is

al alongst of high steepe stonie hilles, & without it full of manie rockes verie strange to behold, but it hath manie faire deep havens, with verie good anckorground, where in great abundance of timber and boards laden. The first Havens to the eastwardes of the Naze, is called the Kloof or the Cowe & Calfe, after two high hommockes, good to be knowne, the one somewhat greater then the other, which lye within the Haven upon the high land, and are so called by the Dutch Schippers. He that will saile into this Haven comming from the westwardes, shall meere with a greate rock somewhat to the eastwardes off the Naze, called Nelyn, whereupon is a Warder, being past that he shall find another out rock, whereupon standeth also a Warder, called Sparrels. Betwixt these two out rockes, he must runne into this haven the Cloof. When he commeth against Sparrels, there lieth a suncken rock under water, where of the must take heede. Somewhat within Sparrels lyeth an other Rock in the farewaye, but above water, which he must leave on the larboard side. In sailing in so, in the haven dorth open it self, by litle and litle, and so shall come against the Cloof: being come within it the must edge up to the westwardes, about the poynt, and ankor there in a sand baye, in fifteen or sixteen fathom, so that the two foresayde hommockes the Cowe and the Calfe stande about northeast from him.

The kloof
Cowe an
Calf.

A litle to the eastwards of Sparrels lyeth a Haven called Scarfoud, or Westrysen, for io saile in there, you must leave Sparrels to the westwards on the larboard side, and all the great Holmes or rocks to the eastwardes on the starboard side, and runne so inwards untill you come into the haven.

Scarfoud

Four leagues to the eastwards of Scarfoud, lieth the Iland Holyfoud, whereupon stande two greate Warders, you must sayle in to the westwards of Iland, untill that you be within it, and ankor under the foresayd Iland. Thwart of it runneth in a great Sound into the land, where you may sayle in, and where manie shippes lade.

Holyfoud

About three league eastnortheast from Holyfoud and eig leagues to the eastwardes off the Naze, lyeth the haven and Iland Fleckerie, you may sayle in at both sides of the Iland, as well from the westwardes, as from the eastwardes in to the haven of Fleckerie. The westergat lyeth in northnortheast. When you com of from Holyfoud then you see open into the Sound, you must sayle alongst by the Rockes without Holyfoud, untill you come within the Iland Fleckerie, and edge the westwards towards the land, untill you come within the Dieveholme, where the Gallowes standeth upon, and ankor by the west land, in fiteene, sixteene, or twentie fathome: You must bring out there an ankor a head, and make a cable fast on the rocks upon the land. You may runne from thence to the eastwardes of the Iland Fleckerie, out againe at the Easter-gatte eastnortheast into sea, and then you must leave the litle Iland within the Warders, which lyeth at the east end of the Iland Fleckerie, with all the greate rockes by it on the starboard side, and all the black holmes on the larboard side.

Fleckerie.

The we-
stergat of
Fleckerie.

The Easter-gatte of Fleckerie goeth in westnorthwest, betwixt the Iland Fleckerie and the pointe of Ransound. When you come before it, you may see open in the Vosse. For to saile in there, you must leave all the black rocks thwart of the point of Ransound on the starboard side, and the greate graye rockes with the litle Iland, where the Warders stand upon, on the larboard side, when as you come then by the fornamed Dieveholm, you must runne to the westwardes of it into the Sandbay, and ankor there, as is before said.

The easter
gatte.

When you are thwart of the Easter-gatte of Fleckerie, then there lieth right thwart from you within the land a high round hill, which men doe call the Boate turned up side downe, which lieth out above all the lands there abouts, and comming from the westwardes against Fleckerie, there shewe also three high double land, which by litle and litle seeme to goe to nothing towards the Drommels.

Three leagues to the eastwardes of Fleckerie lyeth Reperwyck, a broade and wide Sound, lying in north, and north and by west. For to sayle in there you must runne in by the land of Wolf-sound (lying on the east side of this haven) leaving all the rocks (and also where the mast of Wolf-sound doe stand upon) on the starboard side, and all the rocks of Ransound on the larboard side, untill that you come to the end, or within in the haven, and then you must edge up to the westwardes about the point, and ankor there, that is a good haven for ships that are bound to the westwardes.

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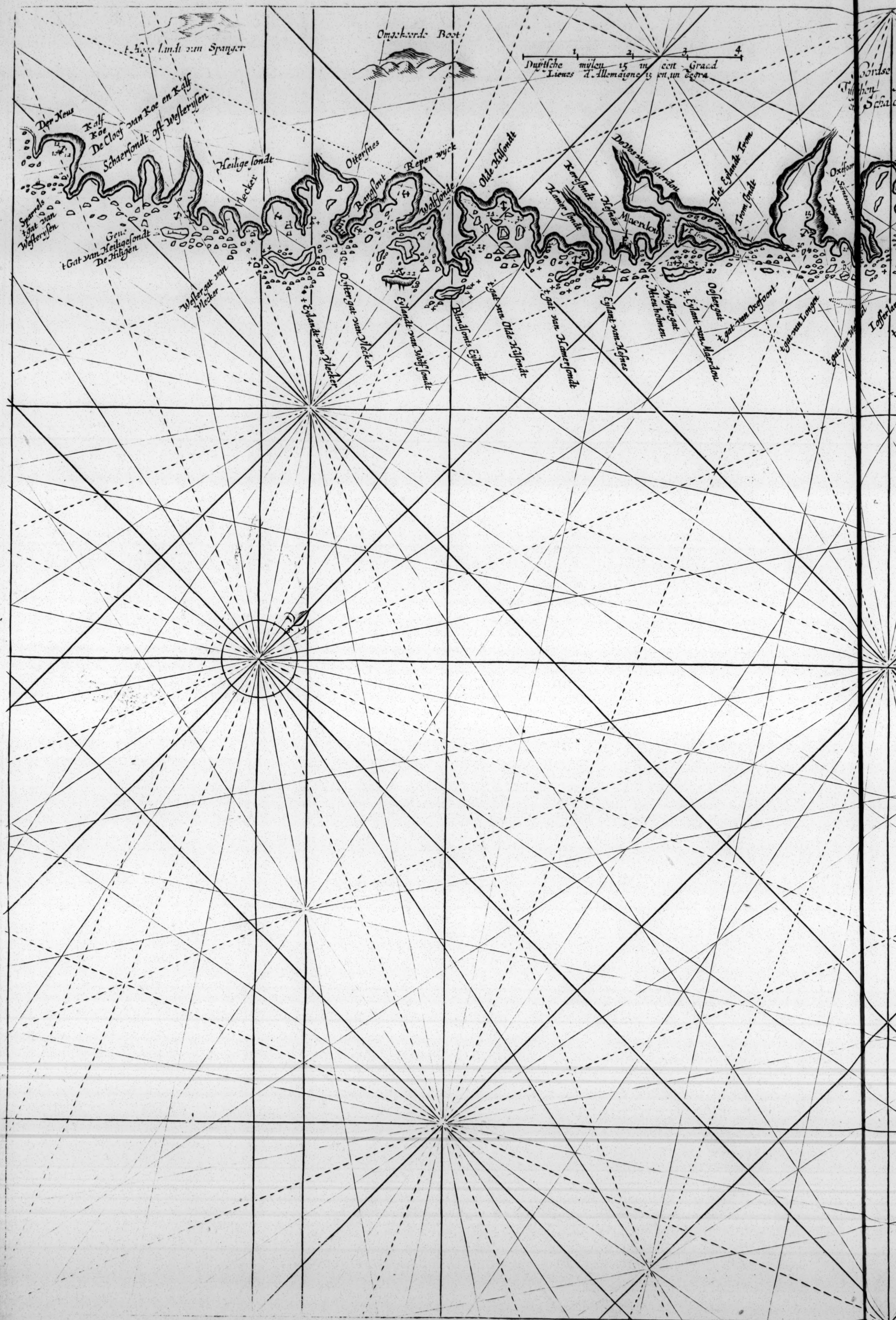
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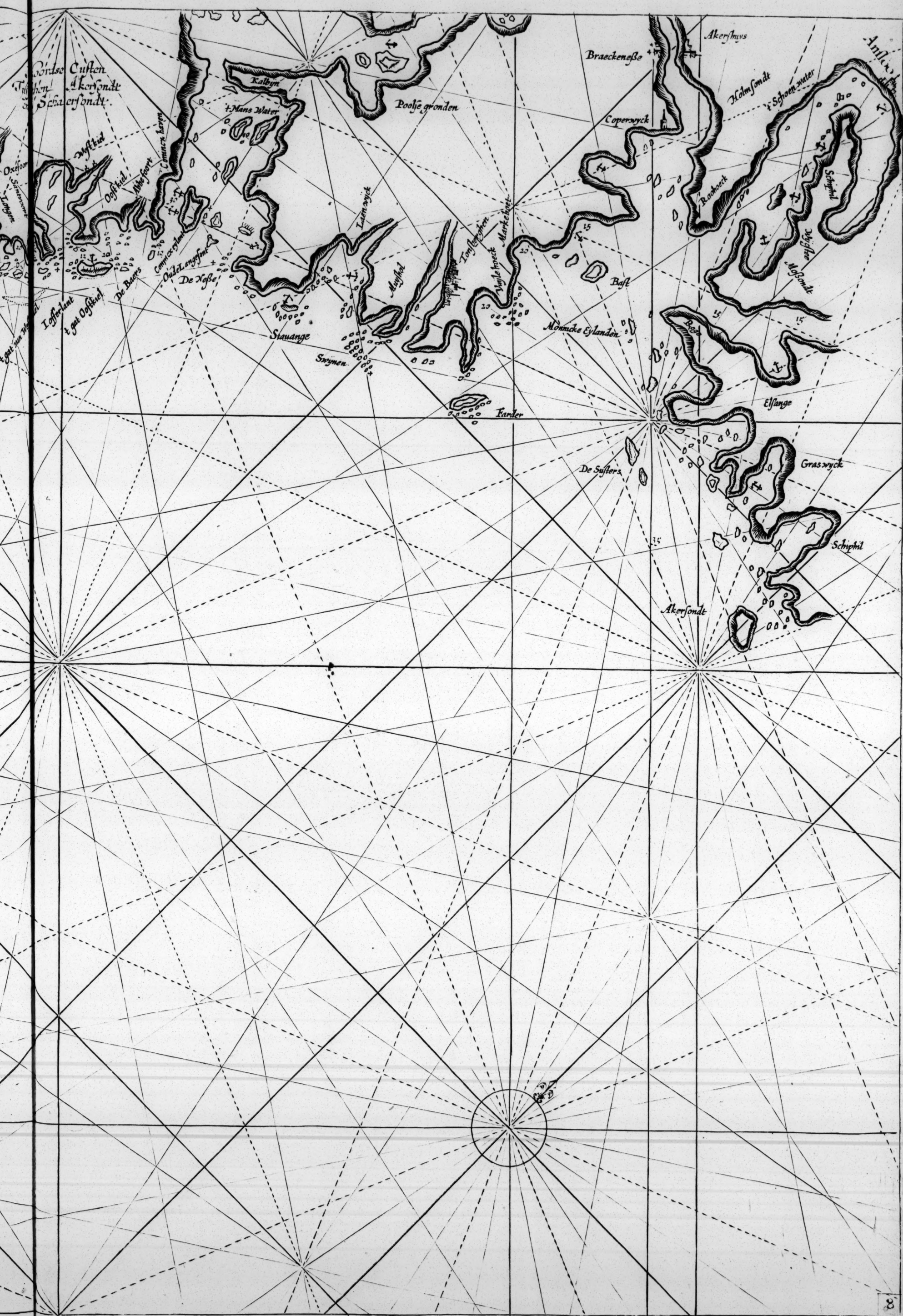
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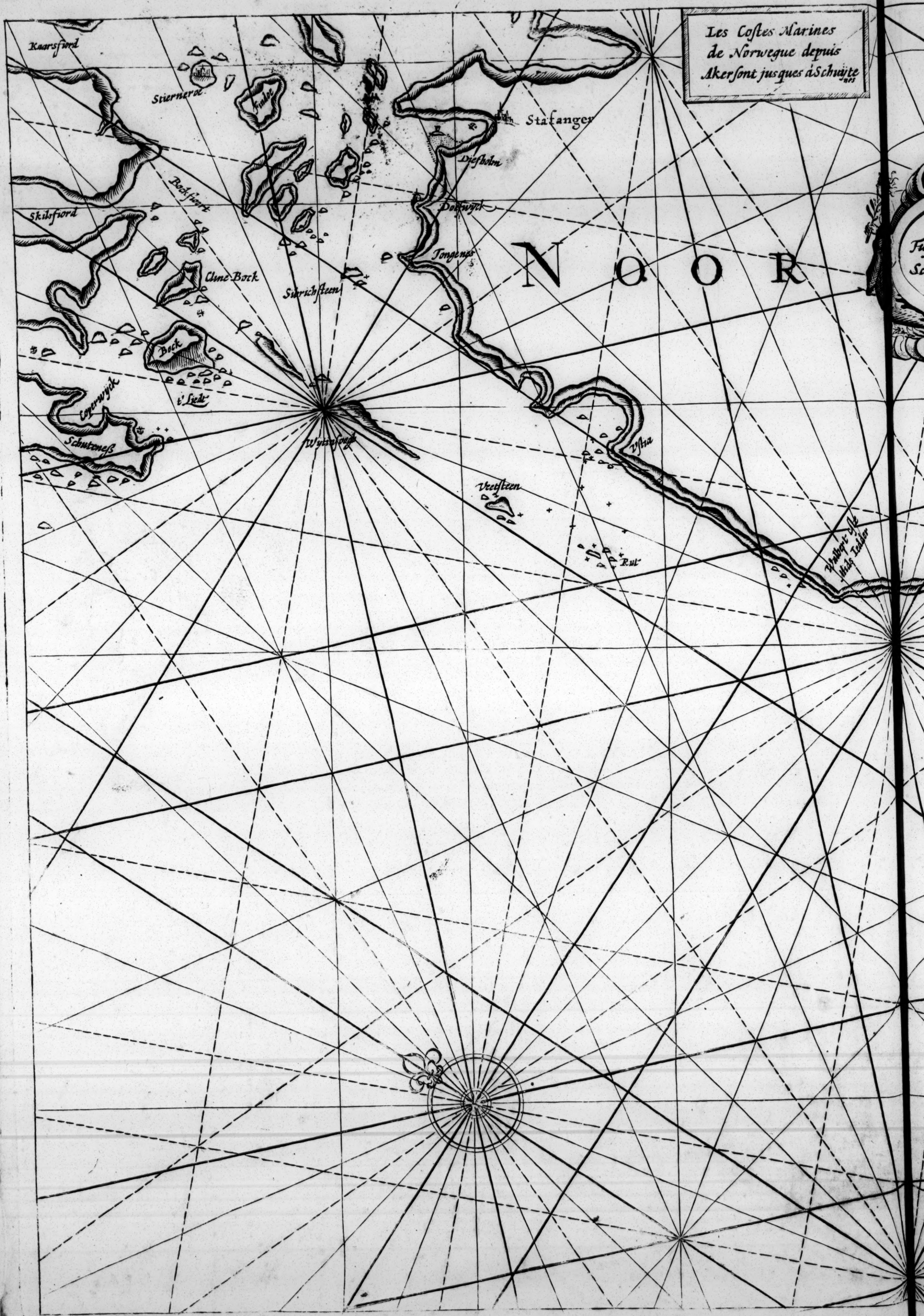
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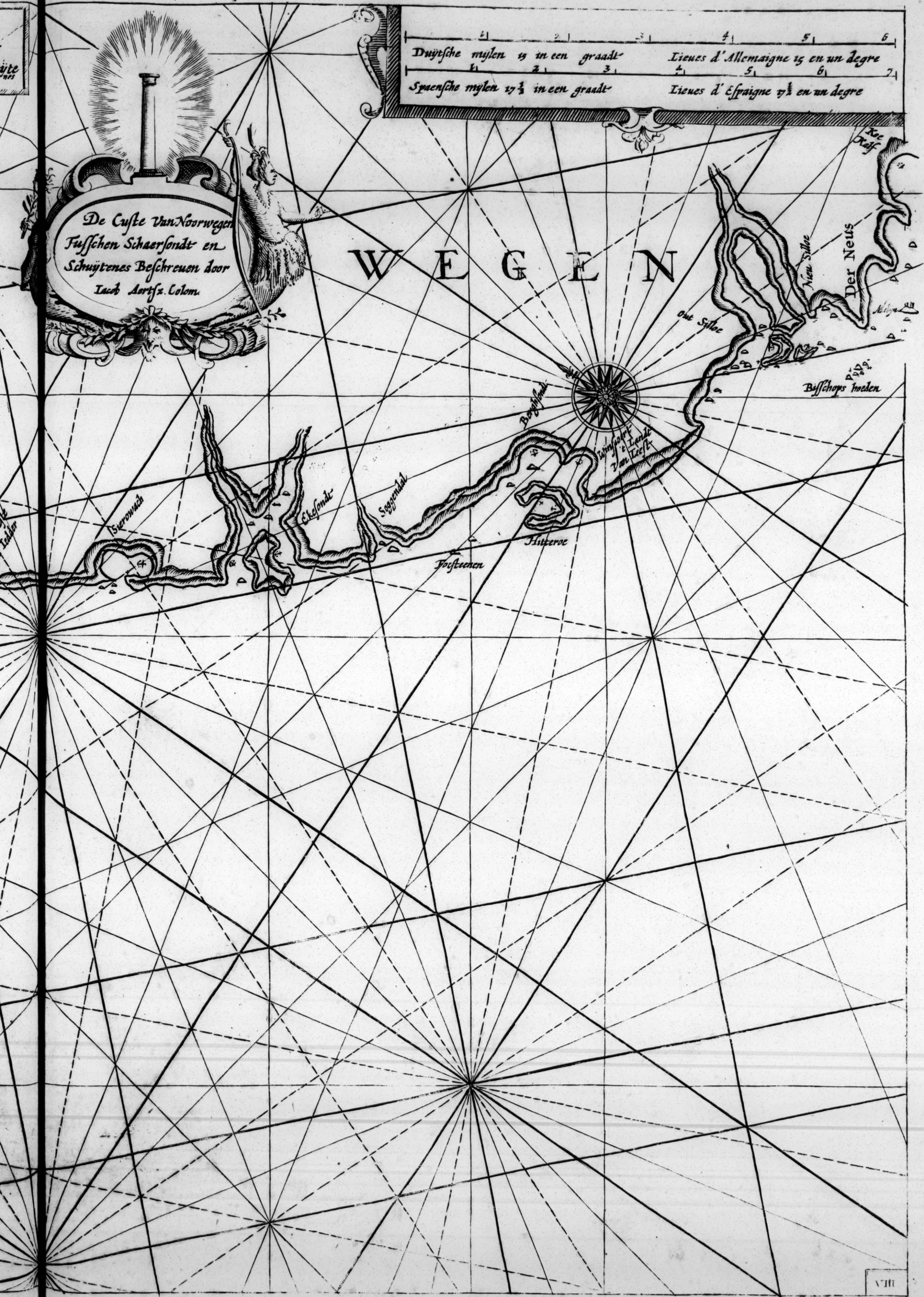






Les Costes Marines
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Wolf-sound

On the east side off Reperwyck lieth Wolf-sound, before it lye two great Ilands which shew them selves in high gray Rocks, with three or foure Warders upon them, whereby you may know them.

Wolf-sound is a narrow haven for to sail into, there stand two maste upon the westland, where you must goe in close by, leaving them on the larboard side, and some little rockes on the starboard side, untill that you come within the greates Iland, whereupon the great Warders stand, there you may anchor, and lye landlockt for all windes. From thence you may runne foorth through within the rocks and come out againe into the sea, by the old Hill-sound, or you may runne out also at the Eastergatte of Wolf-sound, there standeth a greates Warde on the west side of the gaten, upon a round high rock, there you may saile out or in by it where you will.

Old Hill-sound.

To the eastwards off Wolf-sound lieth olde Hill-sound but betwixt them both, at the point off the west side off old Hill-sound lieth the Iland of Blind-sound, to the eastwards off it lye manie greates rockes, with two or three Warders upon them.

For to saile into the old Hillsound, you must runne along to the eastwards of Blind-sound with the rocks that lye by it, in by the west land, leaving them on the larboard side, & the foresaide greates rockes or Holmes with the Warders altogether on the starboard side, there are divers faire sounds, where men may saile into and anchor in, without taking hurt. You may edge up to the westwards about the point, and saile through betwixt the Ilands, that you can not see the Sea.

Hamer-sound.

To the eastwards of old Hillsound lieth Hamer-sound lying in northnortheast. On the west side of the havens mouth lieth a suncken rock which you must avoyd, and saile close alongst by the Iland, which lieth on the east side of the havens mouth, and anchor behinde the Iland right against the Warders, in thirtie fathom. The easter-gatte lieth to the eastwards off that Iland, in and out northwest, and southeast: upon the west side lieth a rock with a Warde.

Kerck-sound.

Hefnesse.

To the eastwards of Hamer-sound, men doe goe into Kerck-sound, and then a halfe league more to the eastwards lieth the haven of Hefnes. Upon the Iland of Hefnesse stand two Warders, thwart of them it is verie steepe, but to wards the little church it is sholder, to wete, about thirtie fathome: the out-rockes thereabouts are all redde of colour.

On the west side of the havens mouth lieth a suncken rock under water, called the Koenagle, upon the land stand two litle mastes, when they come one in the other, then you are thwart of the Koenagell. The two foresaid little mastes, stand upon a graye Holme, leave that on the starboard side, and go so still inwards, there it is high land, and the Drommels lye from thence northnorthwest within the land, there you may saile through within the rocks, untill you come into Maerdow.

Maerdow.

The Iland Maerdow standeth (upon the top of it) full of trees,

and round about it are all bare rockes. On each side off the Iland goeth in a channell. The westergatte or channell goeth in to the westwardes of the Iland, and the eastergatte to the eastwardes off it. For to saile into the westergatte, you must leave the Mewholmes (that are a few rockes and Ilands to the westwardes of the Iland of Maerdow) on the larboard side, and the Iland on the starboard side, and run in so betwixt them both northwest and by north, but with a south west wind, you must saile in northwest. Upon the northermost Miewholme standeth a Warde.

Thwart of the west end of the Iland Maerdow lieth a suncken rock under water, where of you must take heed, when you saile in thus to the eastwards of the Miewholmes. When you are come within the foresaid west point or the Iland Maerdow, you may runne up to wards the northeast behind it, and anchor in 12 or 13 fathom, or saile up towards the north-northwest into the Sound, and anchor there on the west side in 16, 14, or 12, fathom, according as you saile farre in. In the going into the sound, or haven, it is 34 fathom deep.

With a bare winde, or otherwise, you may saile also into this westergat of Maerdow to the westwardes of Miewholmes, thus: To the westwardes of the southermost Niewholme, not farre from it, lye two litle rockes, even above water, and a litle further of from in two other rockes which are somewhat greater, you must runne in amidst the channell through betwixt them, leaving the two smallest lying on the starboard side, and the two greatest on the larboard side, that channell lieth through most north and north and by east. Being come to the end of the Miewholmes, you may saile up either towards the northeast behinde the Iland Maerdow, or westwards into the haven, as is before said. There goeth sometimes a good tyde out of this haven, & the westerly windes doe blow commonly out of this channell betwixt the high lands therefore he that will come in here with a westerly winde, must be very carefull, and keep up his top sailes, or els he shold lightly not be able to get the haven, but drive out of it against his will.

The eastergat lieth in westsouthwest there lieth a suncken rock on the starboard side, when you saile in, therefore you must run in close by the Iland. It is not deeper there in the gat or channell then three fathom, but being come within it, you shall finde it deeper, you may anchor there under the Iland in twelve or thirteene fathom, or you may run up to the westwards into the Sound, as is before said. To anchor under the Iland there is the shouldest water, but with a northwest or northnorthwest winde, it is not so good to come from thence as out of the haven, but with an easterly winde it is better to set sail from thence and to get into sea. When the Drommels are northwest and northwest and by north from you, then you are right thwart of Maerdow. If you run in so out of the sea, right with the Drommels, you shall fall right with Maerdow, that is

For to sail into Maerdow, through within the Niewholmes.

The easter gat of Maerdow.

Marcks of Maerdow.

a certain marck to know whether you be thwart of Maerdow, or tho the eastwards or the westwards of it, but when you are close before the land, or before the Havens mouth, you can not see the Drommels, because they are then hidden of the cliffeland.

About halfe league to the eastwards of Maerdow standeth a litle white Church upon the sea side, to the eastwards of it goeth in the Trom-sound, being a faire Sound. Without in the coming in, stand on the east or north-side two Warders upon a high hill, you must saile in by them, and thwart of them you may also anchor, and from thence you may saile in furter behind the land Trom, and the land of Maerdow, untill you come into the Sound of Maerdow.

About a league to the eastwards of Trom-sound lieth the haven of Oxeford, which is a great broad, and large Sound, lying in first without betwixt the rocks, north. Without in the coming in to the vvestwards of the havens mouth, lieth a long rock, vvhich you must leave on the larboard side, and

broad, with may bights, where you may anchor every where in 20 and 25 fathom.

A league to the eastwards of Oxeford lieth Longen before it lieth a litle round Iland or rock on the east side of the haven, upon which standeth a mast with a barrell upon a Warde. For to saile in there, you must run in close by that land where

Longen.

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the

The Haven of Maerdow.



somewhat past that long rock lieth a suncken rock which you must leave on the starboard side and run in still north unto the west point of the land, thwart vvhich off lieth a suncken rock vvhich you must avoyd, when that you come then within the west point, you must saile in northwest and by north, and anchor on the north side of the haven, there it is vvide and

the Warder with the barrel standeth upon, close alongft by the Warder, but there standeth a hand on the starboard fide of the havens mouth, which pointeth that there lyeth thwart of it a funcken rock under water, there you must edge fomewhat off from the shoare. Being within there, you may run to the eastwards againe into sea, and come out in the Sound off Sandvoordt.

When you are before Oxeford and Longen then the Drommels lye about westnorthwest from you.

A great league to the eastwards of Longen lieth Sandfort. For to faile in there you must leave all the litle Rock on the starboard fide, and run so alongft by the land untill you come within the Longholms which remain on the larboard fide, and then right into Bight. This is a faire haven men come into it from the eastwards. Thwart of Sandvort lyeth a banck at Sea, which at some places is not deeper then 3, or 4, fathom, and lyeth alongft to the eastwards untill thwart of Westkiell.

A league to the eastwards of Sandvoort lieth the haven off Westkiell, a litle to the eastwards of it lieth Jufferland. For to faile into Westkiell, you must leave all the great roks (which lye of from Jufferland on the starboard fide,) and all the foresaid litle rocks of Sandvoort, and also a white holme whereupon a mast standeth on the larboard fide, & run in first north-west and afterwards northnorthwest and at last north, untill you come about the westpoynt, and then you must edge up northwest to the northfide of the Ylands which ly within the haven, there is a Vosse, or an Overfall of water, there you may ankor in 20 or 25 fathom.

When you come before Westkiell, you may see within the land three high hills, and also the high land of Longfoud, lying northwards from you, that land is altogether very good to be knowne, he that seeth it once, and taken regard of it, shall know it very wel another time, when he commeth thereabouts.

From the northermost rocks of Iofferland unto the Baers, that is the southermost or westernmost point of Longfoud, the course is northnortheast a great league. Betwixt them both lye two havens. Eastkiell and Abbefoord, men sail in there to the eastwards of the out rocks of Iofferland. From these foresayd northermost out-rocke of Iofferland unto Eastkiell, it is northwest about a league, but to Abbefoord northnorthwest and north and by west also a league. Men may (comming from the southwards, or from Westkiell) sayle through within jofferland, into Eastkiell, or Abbefoord.

For to sayle through within jofferland from westkiell, the Sound lyeth through the channell first northeast and northeast and by north, and then eastnortheast, and afterwards againe northeast, and then you come to a place where the sound is fomewhat broader, there lyeth a funcken rock, which you must leave on the starboard fide, and edge to the north shoare. Being past that, you shall come againe in a very narrow sound which lyeth through most northeast, and is at some places so narrow that the yard armes doe almost touch the rockes. Being through that narrow place, you must goe northeast and by east, and eastnortheast, untill you come thwart of the Longfoud, then you may sayle in there northnorthwest, or sayle into the sea as you will: Behinde jofferland you may also ankor in 15 or 20 fathom.

A litle to the westwards of the poynt of the Naze lye two havens, New and old Silloe, or Silieu; some doe call these one haven (like as also men may doe) and bistinguish it with an easter and wester-gat or Haven, for men can goe with boats through within the rockes from the one into the other, but not with great ships.

For to sayle into the easter-gat, or new Silloe you must take heede of the Bishops Boeden, which are a few out-rockes a litle to westwards of the point of the Naze, right before the midst of the sound, leave them on the larboard fide, and sayle in alongft by the land of the Naze untill you come fomewhat within the foresayd Bishops Boeden, and then you shall finde there also a funcken rock, which you must avoyd, run about to the northwards of it & edge then up to the westwards behinde the Yland of New Silloe, and ankor there against the white Church within the foresayd rock.

For to sayle into the wester-gat, or old Silloe, you must run about to the westwards of the out-rockes, and Bishops-Boeden, and faile right with the south end of the land of Leest; being come by it: run to the eastwards alongft by it, but take heed of some rocks, which lye of from the innermost Yland on the starboard fide, being there within ankor against the Yland, where you please.

From the Naze to the Yland Hitteroe, or Hitteren, the coast lyeth alongft the land of Leest westnorthwest 5 leagues. To

the southwards or the westwards of that Yland men doe sayle into the haven of windfoord, which lyeth in northeast, but to Windfoord, the northwards of it men doe run into Berg-sound, eastnorth-east in betwixt the Yland and the land.

In that lland is also a good haven, which you must faile into from the northwards, the havens mouth is not very wide when you are come in within it, you may edge up to the eastwards or southwards, and ankor.

Two leagues to the northwardes of Hitteroe lyeth a haven called Soggendall; there lyeth a litle Yland before it, within men may ankor, it is a good road for them which are bound to the southwards. Betwixt them both, not farre without the land lye two out-rockes alongft the shore, called Fockstones, the one lyeth a litle more to the seawards then the other.

A league to the northwards of Soggen-dall lieth Ekefoud, before it lieth an lland, which you may faile into on both sides of it, the southergat lieth in northeast; being come in there you must ankor on the north fide of the haven in a bay, there is the best road in 8 or nine fathom, the norther-gat lieth in to the eastwards, being come in there, you may ankor at divers places. A league to the northwards of Ekefoud lieth a haven called Sierowach. For to faile in there, comming from the northwards; you must run in right with the southermost sand-bay untill you come close by the shore, and then the haven doth open it selfe, loof up close alongft by the north shore, then run up by it to the southwards, and avoyd the west point, thwart of it lieth a funcken rock twelve foot under water; being there within, let you, ankor fall in 7 or 8 fathom, and bring a cable on the west shore, then you shall lye land-lockt for all windes. This a good haven for those which are bound to the northwards.

To the northwards of Sierowach lieth the land the Jedder, which lieth from Sierowach first northwest and by north two great leagues to point Walbert, or Mids-jedder, and the north 4 leagues, which is altogether a clean whole coast, without any dangers or havens, except at the very north end, from which runneth off a litle riffe northwest into sea, towards the Veetstone.

The Veetstone is a great rock, lying about two leagues without the land, lying northnorthwest from Mids-jedder five league, betwixt them both, a great league to the southwards off the Feetstone, lye some low black rockes, called Rut. When as you faile from Mids-jedder on northnorthwest towards the Veetstone, then the Veetstone doth shew him selfe very round, like a hay-cock, and sailing so, you might lightly fall with the foresaid rocks of Rut, but being a litle more to seawards, the Veetstone sheweth it self a litle longer on the west fide, then you can not take hurt of the rocks of Rut.

About two leagues northnorthwest from the Veetstone lyeth and Yland, whereupon standeth a Church called Whithings eye, but northnortheast from the Veetstone 4 leagues, lyeth another lland before the sound of Stavanger, called Sibrichstone.

If you will sayle into Stavanger comming from the southwards, then sayle through betwixt the Veetstone & the maine land, leaving also the foresaid rocks of Rut, lying on the starboard fides but you must take very good heed of that litle stone-riff which lieth of from the northend of the Jedder, faile in so untill that the Veetstone doe lye southwest from you, then goe in northeast towards the point of Tongenes, which is a long point and low land on the south fide of the found.

When as you sayle now from the Veetstone towards Tongenes, then you shall see that lland Sibrichstone before the found, which doth shew it self in two parts, leave that on the larboard fide, and sayle in by the point of Tongenes, but there lieth a rock off to the northwards from the poynt: sayle through betwixt the rock and the point, about east or east-southeast into Doeswycke; when you are within the castle of Doeswycke, there you may ankor. But if you will sayle in further before the thown of Stavanger, then leave the Diefholm on the starboard fide, and sayle in southeast, and south-southeast before the towne, and ankor there where you please.

But when as you come from the northwards, and will sayle to Stavanger, then run through betwixt the Veetstone and the Whithings eye, & then goe on northeast towards Sibrichstone, and the point of Tongenes, and doe further is hath been before thought.

From the Veetstone to Schuytenes, the course is north-northwest five leagues: but from Schuytenes to Sibrichstone through betwixt Whithings-eye, the course is east 5 leagues.

Four leagues west and west and by north to sea wards from Schuytenes lye the rocks called the Outseers.

of Outseers.

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Les Costes de Norwege
Entre Schuyttenes et
Stemmeshest
Ches Jacques Colone.



De Corte
van NOORWE
van Bergen tot Stem
Niculyx Bechre.

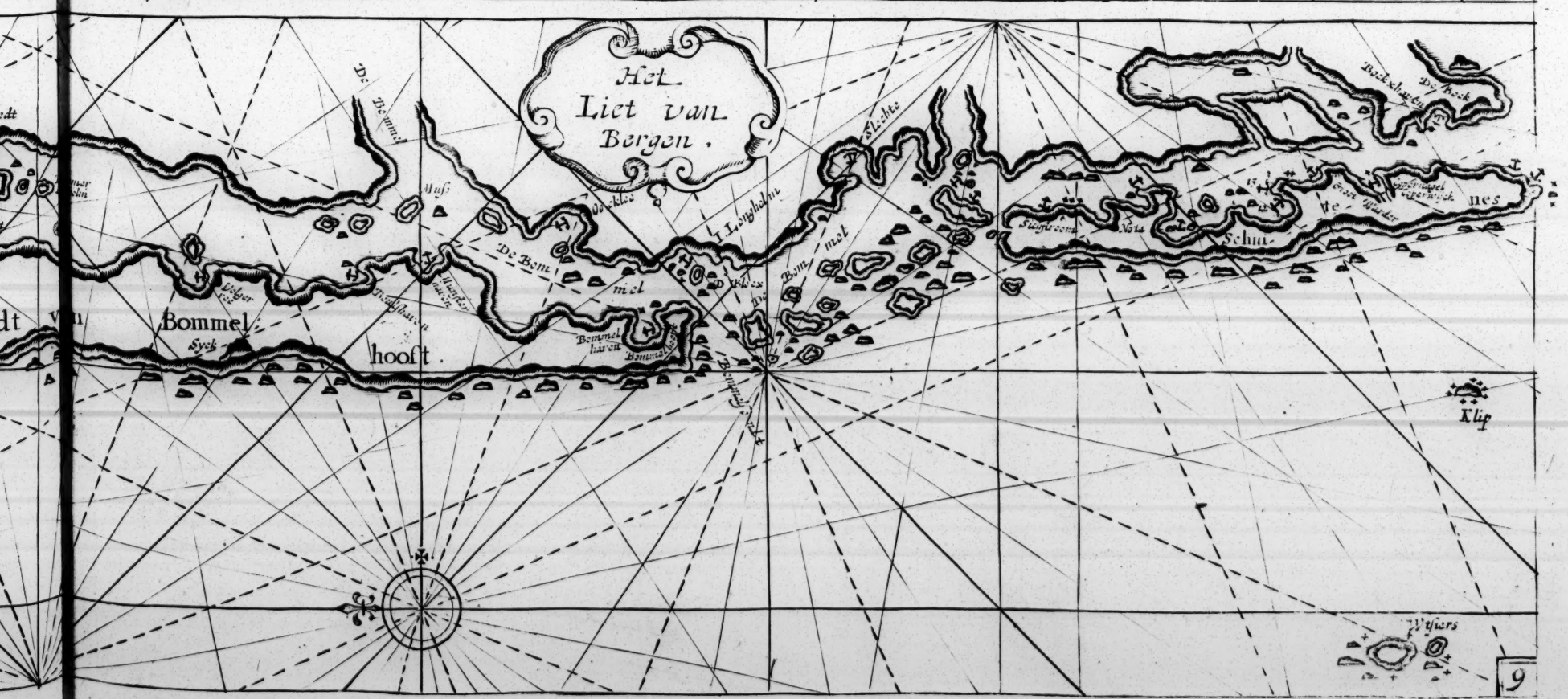
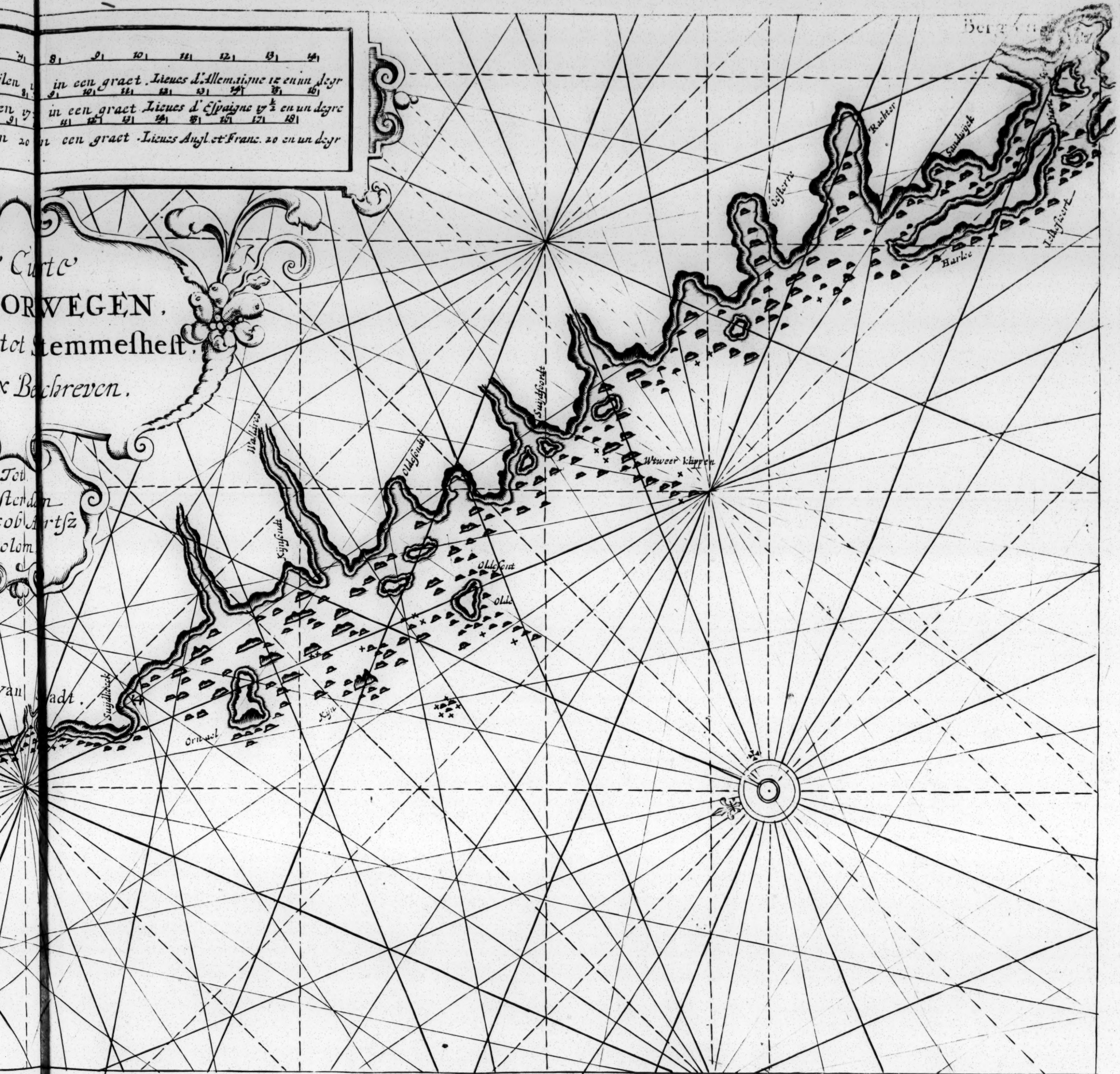
Tot
Amsterdam
bij Jacob Artsz
Colom

Duïtſche Molen 15 in een graadt
Lignes d'Allemagne 15 en un de gr.

groote Eylandt.

81 21 201 121 131 141
 in een graet. Lieues d'Allemagne 12 en un degr
 in een graet Lieues d'Espagne 7 1/2 en un degr
 in een graet Lieues Angl et Franc. 20 en un degr

Carte
 NORWEGEN.
 tot stemmesheit.
 x Beschreven.



Of the streames on these coasts.

On these Coastes of Norway of from the Naze, untill past Bergen unto Stade, the water riseth and falleth, but keepeth no certaine tyde: but from thence towards Dronten, and to the northwards of it, it keepeth tyde according to the moone, like as in other places.

How these landes doe lye one from the other and from other lands.

From Iland Farder to the Longfoud westsouthwest.	8 leagues
From farder to Larwyke westsouthwest.	4 leagues
From Monck Iland, or Roge to farder, southsouthwest	5 leagues
From Bait to farder south and by east about	5 leagues
From Soen-water to farder south or somewhat more westerly	8 leagues
From Copperwyke to the Bait south and by east	4 leagues
From Redpoint to the Bait westsouthwest	4 leagues
From Sisters to the Bait northwest	5 leagues
From Aker-foud to the Sisters west, and by north	4 leagues
From Scharefoud to the Naze westsouthwest	3 leagues
From Flechory to the Naze westsouthwest	8 leagues
From Rut to the Veetstone north and by west	a league and a half
From the Veetstone to Schuytenes northnorthwest	5 leagues
From Sibrichstone to Schuytenes through within Whittings eye west	5 leagues
From the Naze to Outseers the course is northwest	29 leagues
From the Naze to Hitteroe the course is westnorthwest	1 leagues
From Hitteroe to Ekefoud the course is northwest	4 leagues
From Ekefoud to Sierowach northwest and by north	2 leagues
From Sierowach to Mids-Iedder, northwest and by north	2 leagues
From Mids-Iedder to Rut the course is northnorthwest	4 leagues
From Wolf-foud to Fleckory or Reperwyke to the Naze W. S. W.	3 leagues
From Blind-foud to Wolf-foud southsouthwest	3 leagues
From Maerdow to Blindfoud southsouthwest	4 leagues
From Maerdow to Wolf-foud or Reperwyk westsouthwest	8 leagues

From Iofferland to Maerdow southsouthwest	8 leagues
From Eastryfen to Maerdow southsouthwest	3 leagues
From Longfoud to the Iofferland southsouthwest	one great leagues
From Iofferland to Fleckory southsouthwest	19 leagues
From Wolf-foud to Fleckory W. S. W. and f. w. by west about	2 great leagues
From the Naze to the Holmes in Iutland southeast	19 or 20 leagues
From the Naze to Bovenbergen southeast and by south	25 leagues
From the Naze to Holyland the course is south and by east and southsouth-east	67 or 68 leagues
From the Naze to the Eems, south, somewhat easterly	75 or 76 leagues
From the Naze to Born-riffe, south, somewhat westerly	83 leagues
From the Naze to Tessel or Maerdeepe, the course is south and by west distant	93 leagues
From the Naze to Walcheren south and by east	125 or 126 leagues
From the Naze to the Heads, or the Strait betwixt Calice and Dover, the course is southsouthwest, or somewhat more westerly	143 leagues
From the Naze to the Holmes before Yarmouth southsouthwest, somewhat westerly	104 leagues
From the Naze to Flambrough head southsouthwest	106 leagues
From the Naze to Scarborough southsouthwest	99 leagues
From the Naze to the river of Newcastle southsouthwest and by west somewhat westerly	104 leagues
From the Naze to Liet in Scotland W. S. W. somewhat westerly	103 leagues
From the Naze to Boeckneffe west somewhat northly	88 or 89 leagues
From the Naze to Fayrhill westnorthwest	93 leagues
From the Naze to Hitland the course is n.w. and by w. about	100 or 101 leagues
From the Kloor or the Cow and Calf to the Scaw the course is east and by south, somewhat easterly	30 leagues
From Fleckory to the Holmes in Iutland southeast and by south	19 leagues
From Fleckory to the Scaw east and by south	25 or 26 leagues
From Reperwyke to the Scawe east and by south and S. E.	24 leagues
From Maerdow to the Holmes the course is south	24 leagues
From Maerdow to the Scaw southeast and by east	20 or 21 leagues

How these Lands doe shew themselves at sea.

Calfe cow.



Thus sheweth the Cow and Calfe, being four or five leagues north and by east from you.



Thus sheweth the Naze, being four or five league west from you.

The Naze.



Thus sheweth it selfe the land of Norway, betwixt the Naze and Fleckory, when you are about five leagues of from it.

Fleckory

The Boat

Wolf-foud

Hamerfoud.



The land betwixt Fleckory and Maerdow, or the Drommels, sheweth thus, when you come from the westwards, and sayle alongst by it.

Drommels

Hil to the northwards of the Drommels

East Drommels

The land of Westkiell



Thus sheweth the land betwixt Maerdow and Longfoud, when you are about Langen five leagues without the land.



Thus sheweth the land of the Iedder, when it is northeast five leagues from you.



Thus sheweth the land of the Iedder, when it is eastnortheast 5 or 6 leagues from you.

The seventh Demonstration,

In which the Liet of Bergen, and the north coasts of Stemmes, Hest are delineated.



Et wixt Schuytenesse and Bock goeth in the Liet of Bergen. Schuytenesse is about foure leagues long, at the south end lye some suncken rockes and fowle grounds, for the avoyd them comming in out of the sea, you must keep the top of Bock a little without the point of Schuytenesse, and then you shall goe cleare of them; But if you bring Bock close by or to the point of Schuytenesse, and saile so right in for to runne about close by the point of Schuytenesse, you shall surely sayle upon those foresayde suncken Rocx and fowle grounds.

From the south-end of Schuytenesse, the Liet lyeth in first north and north and by west two leagues to the great Warder, which is a road so called after four great Wardes, which stand there thwart of it upon the land of Schuytenes, for the

knowledge of this road: there lye commonly the ships that tarry for a wind, being bound either to the northwards or to the southwards, there it is a very good lying in five, six, seven or eight fathom, as well for northerly as southerly winds, you may also anchor to the northwards of the Warders about a point in five, six, eight, ten and twelve fathom, there you shall lye landlockt for southerly winds.

A little to the southwardes of the Wardes lyeth a Bay, called the Coperwyke, within it is also a good haven for them which Copper-are bound to the eastwards, and will set sail with a west wind: wyke. when a easterly or northerly wind, you can not well shift roads from thence or come out. At the comming in to this Bay lyes a suncken rock, called the Coppernaile, upon it standeth all wayes a great Pole, where by you may see to avoit it.

Without at the south point of Schuytenes on the east side is also little Bay or two, where men may anchor.

A little

The great Warder.

Copper-naile.

Bochaven. A little to the northwardes of Bock, on the east ſide of the Liet is alſo a Bay, called Bockhaven, where men come to anckor.

All theſe roads, as alſo the Copperwyke, are good for thoſe which comming from the ſouthwardes, by reaſon of contrary winds can not get to the great wardes.

A little more ſoutherly then the Coperwyke, on the caſt ſide of the Liet to the northwardes of the Bock, lyeth in north into the land, a Sound, which ſheweth it ſelf (when you come from the ſouthwardes) much broader then the right fare way, ſo that thoſe that are not there very well acquainted, ſhould not think otherwiſe, but that it was the right channell, and ſo ſhould lightly go up a contrary way. Therefore it is neceſſary and needfull to ſail cloſe alongſt by Schuytenes, and not goe off from the weſt ſhore, untill you come thwart of Copperwyke, then you ſhall be within the point of the foreſaid Sound.

Notou. About a great halfe league by north the great Warder, lieth Notou, there ſtandeth a little white church and ſome houſes, thwart of it in the Bay is alſo good anckoring for northerly winds, and good road for them which are bound to the northwardes. Likewise it is good anckoring by north the point of Notou, for them which are bound to the ſouthwardes. Allmoſt at the north end of Schuytenesſe, is alſo a road, called Sichſtreame, where is alſo good lying.

Sichſtreame. At the north end of Schuytenesſe lieth a little Iland when you ſaile up or downe the Liet, you can ſee through betwixt them into ſea. At this Iland is alſo a good road under a rocke, or Iland, called Wybrants-eye, there it is good Anckoring for all windes.

Between that foreſaid Iland and the maine land, you muſt ſaile through a narrow ſtrait, which is but a little more then a ſhippes lengt broad, on the eaſt ſide where of, which is on the ſide of the maine land, there lieth a little rock, or ſunken rock, therefore you muſt ſaile cloſe by the weſt ſide that is cloſe alongſt by the Iland for to avoid the foreſaide rock.

The Bommel. From Wybrants-eye over the Bommel to the Blockx, the courſe is northnorthweſt, but firſt ſomewhat more weſterly about two leagues, betwixt them both it is on the Weſt ſide a broken land, great and little Ilands and rockes. About halfe wayes betwixt them both goeth a channel into ſea, where men doe ſaile much in and out, and it is cleane, broad, and wide. He that will runne out there (comming from the northwardes) may eaſily eſpye it, when he is a halfe league paſt the Blockx. On the weſt ſide lye two little Ilandes or great rockes, which ſhewe much greater then the other rockes, theſe you muſt leave on the larboard ſide, and run out by them ſouthſouthweſt into the ſea.

He that will runne in here out of the ſea, he ſhall (when he commeth to the end of Schuytenesſe) ſee many little Ilands or rockes, he muſt ſaile paſt all theſe, untill that he get ſight of thoſe foreſaid two great rockes, and then in by them leaving them on the ſtarboard ſide, and ſo he ſhall come ſomewhat to the ſouthwardes of the Blockx or Longholme into the Liet.

The Blockx. The Blockx are two rockes, lying very neare even with the water, which you muſt leave on the larboard ſide, in ſailing up, and runne cloſe alongſt by the eaſt ſhore, through betwixt the Blockx and Longholme. Longholme lieth a little above the Blockx, within it is a good Haven, where is good lying. A little to the northwardes of it lye two rockes more, thwart of them lieth a ſunken rock which you muſt avoyd.

Bommell-head. From the Blockx alongſt over the Bommel it is yet 2 leagues, firſt north, and then northnortheaſt, all alongſt by the land of Bommelhead, the ſouth end of this land is a high ſteepe point, called Bommelhead, to the ſouthwardes of it runneth a channel weſtſouthweſt into the ſea called Bommel-found. This channell is good for to know, comming in out of the Sea. The land of Bommel-head is about 4 leagues long, and the firſt long Iland to the northwardes of Schuytenesſe, it is altogether low plaine land except on the ſouth end, which is ſo ſteepe a point, as it if were hewen right off with an Axe. About the middeſt between both ends of this Iland (on the Sea ſide) lieth a very high round hill, called Sick, of faſhion almoſt like a ſugerloaſe or a mans hat, and lieth farre above all that low land, which you may eaſily ſee at both the ends of this Iland, and alſo further, where by it is very good to be knowne.

Bommell-head. For to ſaile into this foreſaid channell out of the Sea, you muſt bring that ſteepe point of Bommel-head eaſtnortheaſt, or ſomewhat more northerly from you, and ſaile then towards it. And then you ſhall leave a great many little Ilands and rockes on the ſtarboard ſide, and the foreſaide point on the larboard ſide, and cloſe in about by it to the northwardes.

A little about this point of Bommel-head, on the Inner ſide, lieth a Haven, called Bommelhaven, there lieth a rock before

the mouth of it, and alſo a ſunken rocke betwixt that rock and the north point of that haven: He that will go in there, muſt go into the ſouthwardes of the rock, in betwixt the ſouth point and the foreſaid rock, leaving the rock on the ſtarboard ſide of him. So ſoone as men are within the haven, they muſt let fall their anckor, within it is broad and wide, and men lye there landlockt for all winds.

At the end of the Bommell lyeth Munſterhaven in the land of Bommell-head, on the weſt ſide of the Liet, even about the point. This is alſo a good haven for them which are bound to the ſouthwardes, and by reaſon off contrary windes can not get further, there ſtandeth a little white church thwart of it men muſt anckor in ten or twelve fathom.

From Munſter-haven to Beul-haven it is north an Engliſh mile, there is alſo good anckoring for ſoutherly windes, further it is north, ſomewhat eaſterly to Volger-road, before it lieth a little Iland, under it, or by it on the one ſide or other men may anckor for all winds. Men may alſo ſaile rond about it, and run in and out at both ſides of it, if they will.

From Munſter-haven to Bremerholme the Liet lieth north, ſomewhat eaſterly about two leagues, there the Liet is divided into two parts, to were, into the Old and the New Liet: The old Liet goeth through to the eaſtwards of Bremerholme and the Iland that lieth to the northwardes of it, but the new land alongſt to the weſterwards of it.

The Olde Liet is not wel to be uſed by them, which are not there very well acquainted, alſo great ſhips that draw twelve or thirteen foot, may not goe through three.

Somewhat more then thwart of the middeſt of Bremerholme, in the narrow of the Old Liet, lieth a ſhowld whereupon is no more then thirteene or fourteene foot water. A little to the northwardes of it on the eaſt ſhoare lieth a bay called Ingeſound, where is good anckoring: there lieth alſo a bay on the weſt ſide, halfe wayes betwixt that foreſaid ſhowld and Bremerholm, where men alſo may anckor.

The new Liet is broad and deepe enoug. Thwart of Bremerholme, in the fareway, neareſt the weſt ſide, lieth a ſunken rock, where of you muſt take heed. For to avoyd it, you muſt marke the Iland before Folger road. If you keep it ſo that you may ſee it without the north-point of Folger-roade, then you can not come to neare that ſunken rock: but if you bring that Iland behind the foreſaid point, ſo that you can not ſee it, you ſhall without ſaile ſaile right upon it, you muſt obſerve theſe marks as well in ſailing up as in ſailing off.

In the middeſt of the New Liet lieth Ruigeholme, there men lye with ſhippes faſt unto two Rings: the one is upon the Iland, and the other upon the point to the northwardes of it, where they bring out Cables to.

From the New Liet to the point of Rootholme, it is northnortheaſt a halfe league, betwixt them both goeth out the Soltmerſioerd weſtſouthweſt into ſea, which is a faire broad and large channell. On the ſouth ſide lye ſome ſunken rockes, but if you run out amid the channell, you can take no hurt of them.

At ſea men doe knowne this Soltmerſioerd by that foreſaid high and round hill Sicke, which is very good to be knowne, and lyeth two leagues to the ſouthwardes of it, about halfe wayes betwixt this Sound and Bommel-found. The land on the ſouth ſide of Soltmerſioerd towards Sick, are ſmall white rockes, which you muſt leave on the ſtarboard ſide, and runne in ſo amid the channell eaſtnortheaſt, and then you can take no hurt of thoſe foreſaid ſunken rockes, lying on the ſouth ſide of this channell. There lyeth alſo a ſunken rocke at ſea before this Sound on the ſouth ſide a little off from the north point of the land of Bommel-head, with hard winds out of the ſea, the ſea breaketh very much upon it, but it lyeth at leaſt 5 or 6 fathom under water.

When as you come in here, you have Redholm on the larboard ſide, and you muſt run northeaſt alongſt by it, untill you come about the foreſaid point.

From the point of Redholm to the Narrow it is north, and through the Narrow northnorthweſt and north & by weſt at leaſt a halfe league. In this ſtrait it is ſo narrow, that you can but even turne throught it on the weſt ſide of the ſtrait lieth a little Iland, thwart of it is good anckor-ground in 13 and 14 fathom.

From the ſtraite to the Reine Knaep, the courſe is northweſt, and by north two leagues: this is a little Iland without trees, cleane round about, which you may ſaile about on both ſides.

Thwart of Reine Knaep on the eaſt ſhoare lyeth Deepeſound a good haven for them which are bound to the ſouthward, the mouth of it is narrow, and alſo but three fathome deepe, but within it is broad and large, and twenty fathome deepe

deepe. Alongst to the westwards of the Remknaep, it is broadest, to the eastwards lyeth a point, and by it a litle Iland you may saile through betwixt the point and the litle Iland. From the Rainecknaep to Bagholme, the course is north and by east a great league: Betwixt them both by some Ilands and rocks, al which you must leave lying on the starboard side, there you may at divers places saile through and within these Ilands and rocks, and at last come out againe by Bagholme into the Liet, but it is not to be done but for them that are there extraordinary well acquainted. Men might lightly get in amongst these Ilands and rockes, so that then should not know how to come out againe. At the east side of Bag-holm men may ankor, but there shooteth off a litle ledge of rocks from the north end, whe reof they must take good heed.

From Bag-holme to Crab-kerke it is north about 3 quarters of a league, this is an indifferent havē for southerly winds, but it is litle, there can lye no more then 2 or 3 shippes.

From Crabbeckerke to Bock up Ra, it is north, somewhat easterly a league, betwixt them both runneth out the Croffe-sound, or Cruysvoert W. S. W. and south west and by west into Sea, which sound is very good to be knowne at Sea, (by three hills) almost like the Drommels on the east side of Norway, but not to high which lye thereabouts within the land, which are also called by some the north Drommels, when they are northeast, or thereabouts from you, then you are open before the Croffe sound. Before the mouth of it lieth a litle Iland nearest the southside, from which lye of some rockes to Seawards, the broadest and largest channell is alongst to the northwards of it you may wel also sail through to the eastwards of the Iland betwixt it and the land, but there it is narrow, yet cleane and cleare without any dangers. When you are within it you must goe in alongst east northeast and northeast and by east, and so shall come into the Liet against Cruysenes, a litle to the Southwards of Bock up Ra.

Bock up Ra is a litle Iland which you may saile about on both sides, alongst to the westwards of it is the common fare-way, and also deepest. When as you saile a bout to the eastwards of it, and come to the north end of Bock, there it is very narrow, and there right in the fareway (somewhat nearer the east shoare then Bock) lieth a suncken rock, there standeth alwayes a pole upon it, for to avoid it, you must leave it on the starboardside, and run alongst to the westwards of it. Betwixt this Rock and Bock, it is no deeper then 16 foot. Right to the westwards thwart of Bok lieth an other Iland, under it you may also ankor in Bock liet. To the westwards of this Iland goeth through the Cobbeliet, which men doe saile through with bare winds, or when they must turn through, because it is broader then on either side of Bock up Ra.

From Bock to the Wattingstream it is north a league, there you can not saile amisse. If you doe not saile against the land, for there lie no dangers, except at the westshore lieth a suncken rok close by the land, whereupon remaineth at low water about 10 foot water. Upon the end of Wattingstream, the course is northwest about a shot of a cast peece, or a quarter of a league, and then you come thwart of litle Alefioerd, which is a haven on the westshore, where is good anchoring both for a north and south wind, under a high round Iland, where you shall lye landlokt. From thence to the Reestone it is north about two leagues, betwixt them both on the westshore lieth great Alefioerd, which is also a haven both for northerly and southerly winds, thwart of it the fareway is about 2 musket shot broad. The Reestone is a rocke under water, lying by the point, where the two high hills standeth, which men doe cal the Lethoorns, these are two high sharp hilles, which men may see farre of, as they saile up or of that Liet. Upon the Reestone standeth allwayes a Pole, that thereby men may avoid it. You may also sail alongst to the eastwards of it, but to the westwardes of it is broadest, and the right fareway, over against it on the westshore lieth Knorwyck, a haven where men may also ankor.

From the Reestone to Werckeneffe, the course is east north east about a quarter of a league, and then you leave the Iland Afland lying on the larboardside to the northwards of you, it lye also two havens where you may also goe to ankor, the one called Struyshaven, and the other Schoonhaven. To the westwards of Afland you may saile to Ieltesioerd, and run out thereabout northwest into the Sea.

When you come out of the Sea into Ieltesioerd, then you come into the Westwards of Afland against the Reestone into the Liet.

At the south point of Afland lieth Ielteschaer, a litle round Iland or rock, whereupon standeth a great Iron ring when as men com up the Liet & with ealmes are in danger to be driven with the current to the northwards along by Afland, then they

bring with the boat a cable fast on it, men may wend round about the foresaid rock without any danger.

From Werckeneffe to Horneffe, it is east a litle distance: when you come by it, you may see the towne of Bergen lye before you, you must ankor before it in the Wage, in 11, 12 or 13 fathom.

To the northwards of Afland lieth the Iland Harle, which is about 5 leagues long, when you come from the northwards, you may run about it on both sides, and so come into the Wage of Bergen. The Harlefiord goeth out about north and by W. and N. N. W. betwixt Afland and the land of Harle.

From Ieltesioerd, or the Wage of Bergen, to Olde, the coast lieth N. N. W. and north and by West about 16 leagues, that is al broken land, with many rocks, vvhre men may saile through within them. The Norway Barkes come off from Stade, all alongst through that broken land and rocks, and within the Iland Harle unto Bergen.

About foure leagues and a halfe to the Southwards of Old, lieth a great row of rocks, lying 3 or 4 leagues without the other rocks, thwart of from the shoare to seawards, called the Outvveers.

Betwixt them and Old lieth a good haven, called South-foort, there lye 3 Ilands before it, vvhre men run in betwixt them both alongst into the Haven.

Olde is a high rock, a good wayes from the land, and loose from the other rocks by the land, but hath some small rocks lying about it, there lieth also a row rocks, a good wayes of from it Southwest into the Sea.

About N. W. and N. W. and by North from Olde, lye two rowes of rocks, vvhreof some lye above and some under water. When as you are either to the northwards or to the southwardes of Old, it doth shew it selfe vwith a great saddle, in 2 hommockes, and going downe round on both sides, but being thvart off, or Westwards from it, them it lieth in one round hil, almost like Coll. You may (comming from the southwards) runne in about the eastwards within Old, northeast to Olde-sound, and come out againe to the northwardes of Olde. Four leagues to the northwardes of Olde-sound lieth Kyn, also a great rocke, which men may saile roundabout, & sheweth it selfe with two sharh Hommocks, almost like a Cowes clawe, or Bishops Myter.

Betwixt Kyn and Olde goeth a great Sound into the land, upon which lye 2 towns, Waldres and Easterdal. Northwest and by west from Kyn lye 3 or 4 rocks, and also some suncken rocks under Water. Southwest and by west about 3 leagues of from it, lye also some rockes above, some under Water.

Three or 4 leagues to the northwards of Kyn lieth Ornael, Ornael also a great rock, which sheweth it self in one great high round hill. Three leagues, or 3 leagues and a half to the northwards of it, lieth the south point of Stade. But Ornael and Olde lye about N. and S. 7 or 8 leagues asunder.

Betwixt Ornael and the S. point of Stade goeth in a great broad sound, from whence men may saile through within the broken land to the southwards to Bergen. A litle within the S. point of Stade is a bay, where men may goe to ankor, thwart of a Seabeakon, and lye sheltred for a West Winde. The land of Stade lieth from the south point to the north point N. N. east, and S. S. W. which is a whole main coast but full close alongst by the shore, with many small rocks, but none that men may saile about with in them for to have any shelter for the Sea. The Norway Barkes off all places to the northwards of it, yea and all those which come off from the North Cape, can saile all alongst the coast of Norway unto Bergen, through vwithin the rocks, except thwart of this land of Stade, there they must run sea-board through the Sea.

Between these 2 foresaid points are also two litle Havens, where men may ride, but a litle or nothing used.

To the northwards of Stade the land lieth with many Ilands N. E. to the broadsound 8 leagues. About halfe wayes lieth a litle Iland or rock, called Swynoe (that is Hogges-Iland) a league from land without the other Ilands of Flowach. When you are close by the north point of Stade, and go on northeast you run through within that litle Iland Swynoe, but with a N. east and by N. course about a seaboard off it.

He that is bound to Roemsdall, or into the Sound off Sudmer, must runne into the Broad-sound, which goeth in at the ends off the Ilands of Flowach east and east by south, the outermost of these Ilands is called Hassieu. When you come to the end off those foresaid Ilands, you shall see east from you about two leagues, a great high short Iland, called Goeden, or some Godsche-sand, and a litle to the Southwards of it, somewhat further in a great black Rocke, of fashion like a Hay-kock, or almost like a Sugerloafe, it is called by the

abkerk

North Drommels

Bock up Ra.

Watting stream.

litle Alefioerd.

Reestone Great Alefioerd.

Lethorns

Knorwyke Werckenes

Struys haven. schoon haven.

Horneffe

Harle

Outvveers

Kyn

Waldres Easterdal

North point of Stade.

Havens on Stade.

Swynoe

Broad-sound.

Goeden

by the saylers the Cookes-broad: faile in rigt with it, but bring not that foresaid rock to or under that Iland, but keep it clear of without it: for els you should surely faile upon the foresaid funcken rockes, which lye under water at the north side of the broadfound.

From the Iland Goedeu or Godsche-sand runneth of also a little riffe, to the southwards, or towards the southeast from it. When you come by that Iland runne about by that little riffe, in betwixt it and foresaid black rock, and ankor a litle within that riffe, under Goeden runne not farre within it, for to avoid a funcken rock, which lyeth somewhat further in, not farre from land, there stand to litle warders upon the shoare, a litle within the riffe, for knowledge off the roade.

Behinde, or to the northwards of Godeu lieth the litle Iland Geske: upon it standeth a litle church on the south side, before it men may also ankor in 8 or 10 fathom cleane ground.

A litle within Goedeu, on the east side of Geske lieth another Iland, greather then Geske, called Walderoe, on both sides off the southeast point off that Iland men may ankor in good cleane ground, and lye land lockt for all windes.

From thwart of Geske and Walderoe lyeth a great multitude of rocks northwest so farre into sea, that comming a sea-board alongst by Swynoe with a northeast course, you should farre within them.

He that comming from the northwards may faile by West alongst by these rocks to Godeu, & leave the aforesaid funcken rocks (lying on the northside of the Broadfound) on the starboard side of him, and runne in about by the point of Goedeu, as hath been before said.

You may also run into the northwards of Goedeu, to wit, in betwixt Goedeu and Geske, and ankor within Geske, or under Walderoe, but it is not well to be done, but for to them which are there verie well acquainted.

There lye manie rocks, some above, and some under water, whereof men must take heede. In at the Broadfounde is the best and surest.

For to runne from Walderoe to Roemdsale, goe on to the northwards, alongst by the great Ilands Luycko, it is in that farewaye, ten, twentie, fortie, sixtie, and eightie fathom deepe, but even past Luycko runneth a stone riffe thwart over the farewaye, on against the point off the maine land, you must thereabouts edge off from the Iland on the larboard side, and runne indifferent close alongst by that pointe of the maine land on the starboard side, and then you runne over the deepest off that Stoneriffe, to wete, in three fathome or thereabouts, as soone as you shall be over it, it is againe verie deepe, of tenne, twentie, and presently an hundred and two hundred fathom. Runne on still by the land on the starboard side, and verie close alongst by it, and leave all the Ilands lye on the larboard side, and so you shall come unto the River of Roemdsale.

Towards the southeast from the foresaid Iland Goedeu or Godsche-sand, goeth a great deepe river into the land, to Sic-kule, Honighpale, and other lading places more.

To the northwards or northeastwards from Geske, lye (amongst a great maine other rocks and litle Ilands) five greates Ilands, the first called Luco, which is a high Iland, like as also the second, betwixt the two goeth in a channel about southeast called Luyckfound.

Luco,
Luyck-
found.

Upon the third called Harmfoe lieth also a high hill, but is a both endes somewhat lowe.

The fourth and smallest called Lemfoe or the lowe Iland sheweth it selfe in two or three lowe hommocks.

The fifth called Flemseu, or the Iland, is a great and lowe Iland, but seemeth litle to see at sea, because there lye but one hommock upon it (not verie greates) and of fashion as the rooff or cabben of a Hoyer, or the west end highest, within the east point of that Iland is a good roade in a bight, where men lye landlockt for all winds.

Roofe
Iland.

To the northwards or eastwards of Flemseu or the Roofe Iland, goeth in a channell called Nogwe Fioert, lying in east and by south, at which men may runne into Roemdsale.

Without these foresaid Iland of from Luco unto Boede lieth

a great multitude off outrocks, great and small, called the Roemdsale shares.

Roemdsale
shares

Eastwardes from the Roofe Iland, or Flemseu, lieth (amongst other rocks and litle Ilands) the Iland Lever, which men may faile about on both sides, either wether they be bound outwards from Roemdsale to Beresound or Boe, or inwards from Boe or Beresound, and will runne through the foresaid Ilands.

Lever.

Beresound is a haven within some rockes even to the southwardes to westwards of the point Boe, there it is good lying, but not good to come into without a Pilot, or some one that is there well acquainted.

Boe.

Boede is an outpoint, with a neck or small point of land, fast to the maine land, alongst to the southwards of it men may run in and up, to the southwards to Beresound, or els goe to ankor in a bay on the northside behinde Boe, by some houses, where they may lye sheltred for a westwinde.

From Boe to Stemmes-Hest, the coast lieth about northeast 3 leagues, betwixt them both about half wayes, lye many small lowe black outrocks, as if they were sowne alongst the shoare, called the Stoppels, betwixt them and the maine land you can not faile through with great shippes without great danger. The Norway Barckes runne alongst with in them, and also ankor there within, under a Rock, which is somewhat greater then the rest, and lyeth about the midlt of the Stoppels (or somewhat nearer the main land) called the Eartholm.

Stoppels

All the Ilands betwixt Broad-found or Flowach and Boe, belong under Roemdsale.

How these lands doe lye one from the other, and from other lands.

From Schuytenes the Bommels-head n.n.w. somewhat northerly	7 leagues
From Bommels-head to Cruysoort northnorthwest	9 leagues
From Cruysoort to Harle northnorthwest	13 leagues
From Schuytenes to the Outseers west, and west and by north	4 leagues
From the Outseers to Ietsefoerd, or the Wage of Bergen north and by west	26 leagues
From Schuytenes to the Flye south and by east southerly	106 leagues
From Schuytenes to the Tellel, south and south and by east	112 leagues
From Schuytenes to Walcheren south	121 or 123 leagues
From Schuytenes to the Holms before Yarmouth south and by west, or somewhat more westerly	113 or 114 leagues
From Schuytenes to Flambrongh head s.w. and by south	104 or 105 leagues
From Schuytenes to Timmourh, the course is southwest	104 leagues
From Schuytenes to Boeckenes west and by south southerly	72 leagues
From the Outseers to the Flye south and by east	103 or 104 leagues
From these Outseers to the rocks Outseers north and by west	40 leagues
From Ietsefoerd or the Wage of Bergen to Hitland, west	48 leagues
From Ietsefoerd, or the Wage of Bergen, to the North end of Hitland west and west and by north	50 leagues
From Schuytenes to Hitland w. and by north, and w.n.w.	66 leagues
From Schuytenes to the northend of Hitland westnorthwest somewhat northerly	71 or 72 leagues
From Ietsefoerd or the Wage of Bergen to the Rocks of Outseers, northnorthwest, and north and by west about	11 or 12 leagues
From the Outseers rocks to Old, northnorthwest and north and by west betwixt	4 and 5 leagues
From Olde to Cyne north and by east, and northnortheast	4 leagues
From Olde to Ornael north, and north and by east	7 or 8 leagues
From Ornael to the south point of Stade northnortheast	3 leagues
From the south point of Stade to the north point, northnortheast	8 leagues
From the north point of Stade to Swyno or Swynooft northeast, and northeast and by north	4 leagues
From Swynoe to the outermost of Flowach, or the broad found, northeast and by east	4 leagues
From the north point of Stade to the Iland Hessen, or the Broad-found northeast	8 leagues
From Hessen to Goedeu east, and east and by south	3 leagues
From Swynoe alongst without to Roemdsale-schares to Boede, the course is northeast and by north	
From Stade to the northend of Hitland westsouthwest	66 leagues
From Stade to the east point of Iland, westnorthwest	200 leagues
From Stade to Greenland northwest about	330 leagues

Of the tydes and courses of the streames.

Betwixt Bergen and Stade the water riseth and falleth, but it keepeth no certaine tyde a southsouthwest, and northnortheast maketh there most full sea. Betwixt Stade, Luyckfound and Boe a southsouthwest and northnorth-east moon maketh high water.

Heights.

The Outseers-rocks lye in	61 degrees
The Iland Kyne in	61 degr. and 30 minutes
Stade in	62 degrees
Broad-found or the Iland Goedeu, in	62 degrees and 30 minutes
Luyckfound in	62 degrees 40 minutes
The Stoppels and Boede in	63 degrees 28 minutes

How these lands doe shew themselves at Sea.



Thus sheweth the Boek, when you are to the southwards of Schuytenes before the Liet.

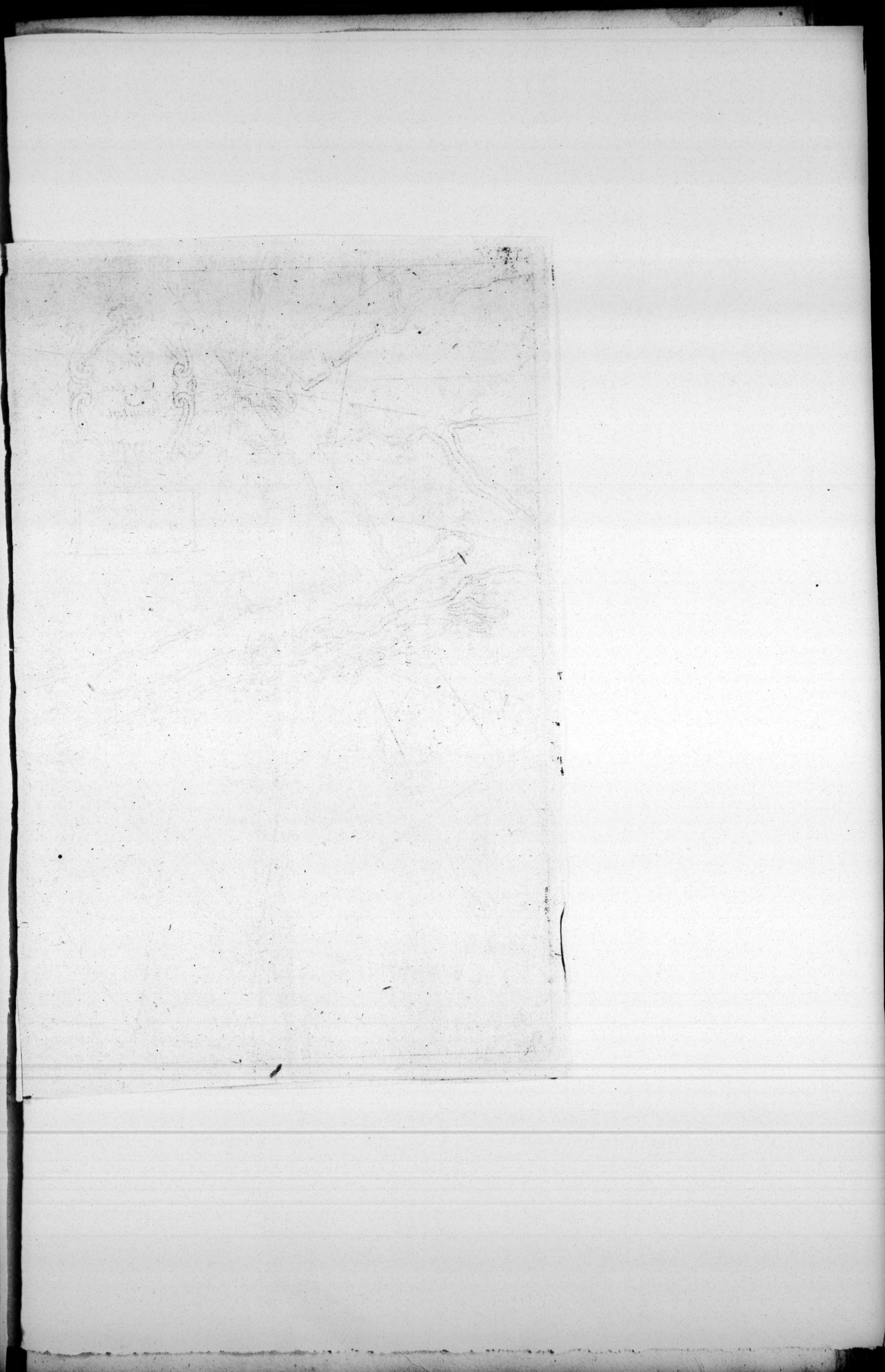


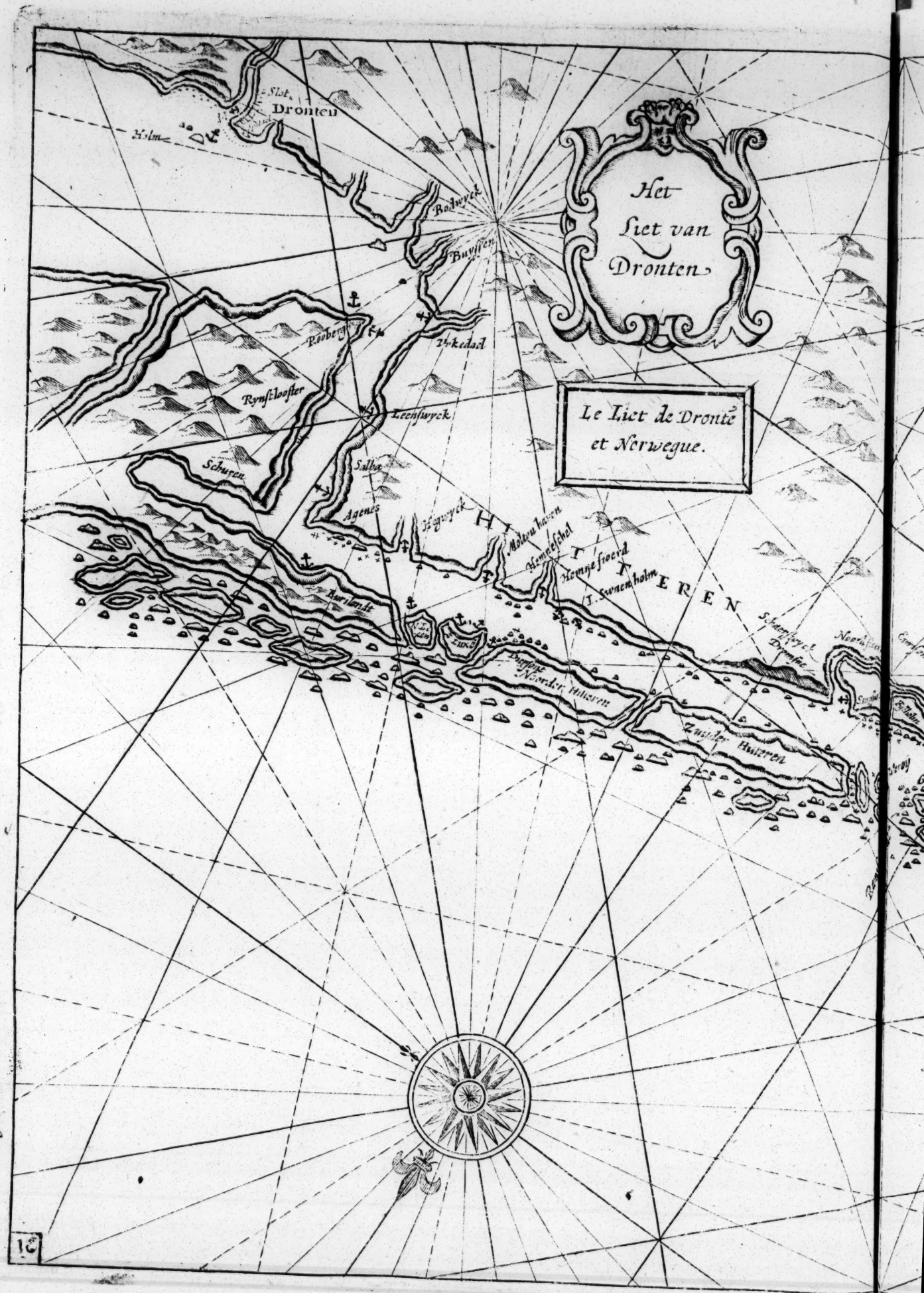
Thus sheweth the hill Sick, when you are to the northwards of Schuytenes.



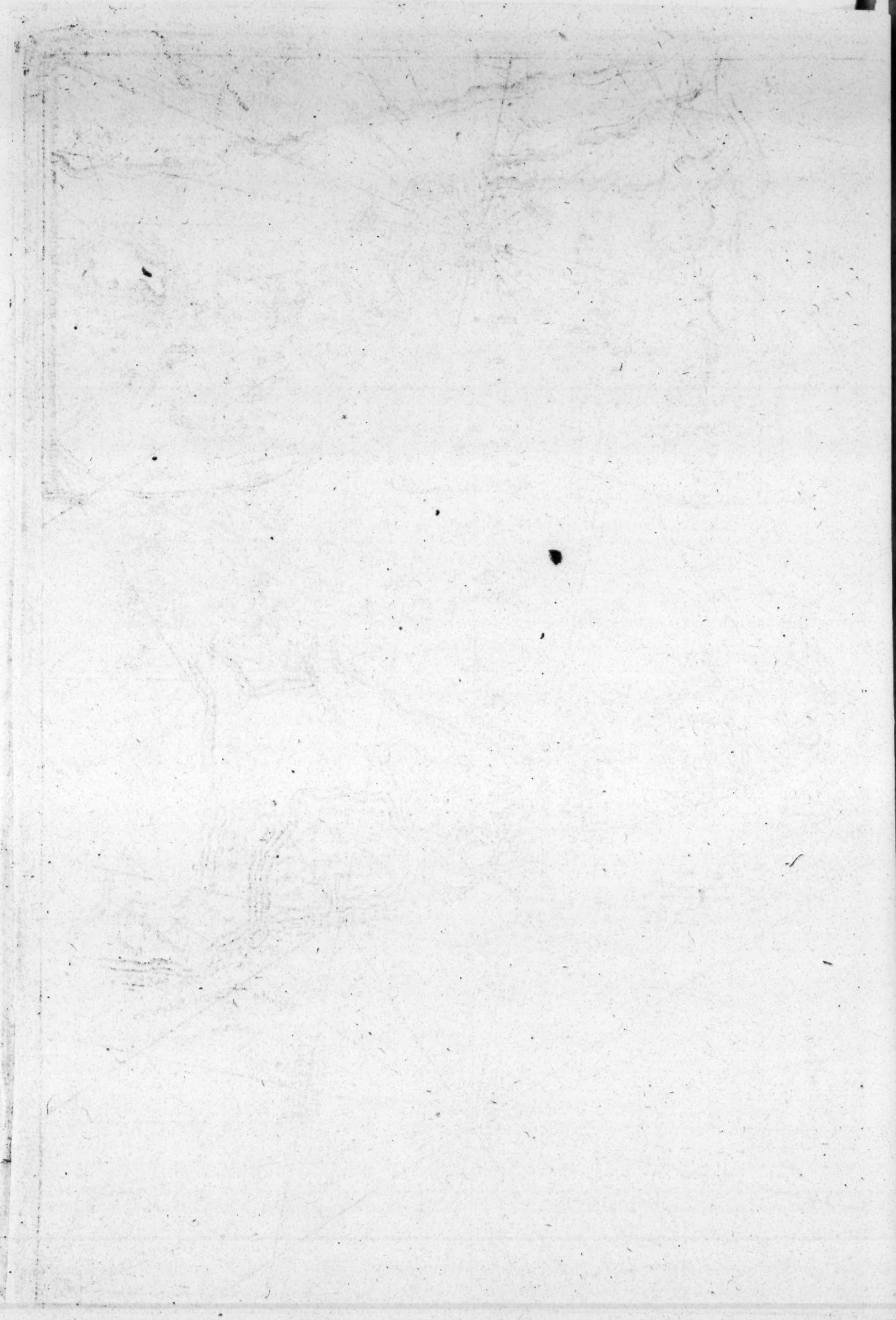
The land about Northfoert and Southfoert, when it lyeth east and by south from you.

South









South point of Stade

Ornael

Kyne

Olde



The sheweth the Ilands Ornael, Kyne and Olde, to the southwards of Stade;



When the south point of Stade lyeth northeast and by north from you, then it sheweth with the land from thence southwards within Ornael, Kyne, and Old, like as it is pourtrayed in this and the figure following.

The land about Olde



This followeth the former figure.



When the point of Stade lyeth southeast 8 leagues from you, it sheweth thus.



When Stade is southsoutheast from you, and Goedeu east 4 leagues, then the land betwixt Stade and the Broade sound sheweth like as is pourtrayed in this and the figure following, and then you are open before the Broad-sound.



This followeth the former figure unto Stade:



Thus sheweth the point of Stemmeshest or Heynst, Flenseu Roofen Island Lemseu Low Island

The forme of Island Luycko, when it is east and by north from you.

Thus sheweth the Island Goedeu, being east from you. Luke



Stemmeshest Thus sheweth the Ilands of Roemfdael, when the middlemost of the three highest and the westernmost is southeast from you about 3 leagues.



The Ilands of Roemfdael.

Thus sheweth the land between Stemmeshest and the Broad-sound, when as you sayle a seaboard, alongst by the Roemfdaels Ilands and Schures.

The eight demonstration,

Where in the Liet off Dronten is shewed.

From Stade to Stemmeshest (or Stemmesnes) the course is alongst without the Ilands northeast & by north about 26 leagues, the land betwixt them both, is called the Governement of Roemfdael.

Stemmeshest is a high point good to be knowne, it sheweth it self when as you get sight of it, comming from the southwardes or the westwards in two Hommocks thwart of it goeth in the Liet, with divers entries.

About a shot of a cast peece from the point lyeth a black round rock, altogether alone, not very great, called the black Ox. Betwixt it and the point goeth in an entrie, called after the foresaid rock, also the black Ox northeast and by east, it is not verie wide, and upon the shouldest 4 or 5 fathom deep at low water, the nearer to the Ox the deeper, and the nearer to the main land the shoulder water.

A little within the Rock, the black Ox lyeth an other great Rock or Island, pale of colour, called Whiteholme, which you must leave in sayling also on the larboard side, you can not sayle through betwixt it and the black, Ox, because from the one to the other it is all full of rocks, some above and some under water.

A little within or to the end of Whiteholm lyeth a suncken rock, which you must leave also on the larboard side.

In calm weater or smooth water you can not well see it, but when it doth blowe any thing hard, you may wel perceive it by the breaking of the sea upon it. On the starboard side within Whiteholm, lyeth a great multitude of rocks, as if they were fowed along the shoare, amongst these rocks a little within or to the eastwards of the point of Stemmeshest lieth Smeerholme, an Island, where men may ride under, and lye sheltred for all winds, execept with east & northeast windes, which blowe there in open, with those windes you can not also come out there, neither with southsoutheast, south, southwest, and southsouthwest winds, you can not also come in there. You must saile in there from the northwards, behinde the Island. In the going in (which is not above a cables length broad, eight or 10 fathom deepe) lyeth a little round rock, at high water, about 6 fathom above vwater, by which you may runne about on both sides.

Nortnorthwest about a halfe league from the black Ox, lyeth also a greater and broader, but a lower rock, called the Vogel, which at high water lyeth a little above water, but with

a spring the sea runneth alongst over it, Betwixt it and the black Ox there semeth to lye in a broad and wide channell, but betwixt them it is ful of suncken rookes, and foule grounds under water: When it is smooth water, it is in no wise good to runne in there, but in fowle weater and with a growne sea, and and that you can not doe otherwise, you might runne in there by the breaking of the sea.

A great half league northnorthwest from the Vogel lye yet some rocks, lying to the eastwardes, called the Newholms, betwixt them and the foresaide Rock the Voghell goeth in a broad and large channell, verie cleane without any dangers. which (after the Rock is also called the Vogell, there men may see all that can doe hurt. The marks for to finde this channell) comming out of the sea are two hills, verie good to be knowne, which lye from thence east and east and by north within the land. The westernmost is a hil somewhat low & round of fashion, almost like a flat hat, called the Clapmuts. The easternmost is a high steepe sharpe Hill, above on the one side with a cutte; like as a steepe, called Manghelbergh. When these are one in the other, then they are about east and by north from you, and then you are also right open before this channell.

For to sayle in there, keepe these two foresaide hilles one in the other, and sayle in right with them east, and east and by north, or (when as you come within the Vogel) somewhat more easterly, so that you have the foresaid Hills out a head a little on the larboard side, untill that you come by the main land, and then eastnortheast alongst by the shoare, (if you be bounde to Dronten) unto the Island Edou to Edoe.

About a league within the Vogel lye two rockes, the westernmost is high and somewhat round, the other is low and also round, and lyeth to the eastwardes from the first, towards the land, you shall runne with the aforesaid course of east and east and by north off from the Vogel, about a shot of a cast-peece alongst to the southwardes of the two rockes. About half wayes betwixt them and the Voghell, (but nearest the two rocks) lye two suncken rockes, these you leave with the same course also on the larboard side, you may see the sea alwayes breake upon them, except in very smooth Water.

You may also sail through betwixt these two foresaide Rocks and the Mewholmes, to wit, alongst to the northwards of the Rocks, untill you come into the Liet, leaving these

Stemmeshest

Black Ox

Whiteholme

Suncken rock

Smeerholme

The Vogel

Neuholms

Clapmuts and Manghelbergh

Two suncken rocks

these two rocks on the larboard side, and the Mewholms on the starboard side.

Alongst to the northwardes of the Mewholms and those two foresaide rockes also a channell where men may sayle through into the Liet, then you must leave these two rockes to the southwardes on the starboard side, and some other rockes to the northwardes of them on the larboard side, and so come also into the Liet.

About three quarters of a league within these two foresaid Rock, lyeth a great suncken rock, right in the midst of the farewaye, which breaketh all wayes, and at low water is uncovered, about which you may sail on both sides. From this suncken rock to Sweggesound, the course is east, and east and by north a league, but the Vogel or black Oxe and Sweggesound are distant about three leagues.

Sweggesound.

Sweggesound is a little Haven behind three great rocks, with a little Island of an English mile long on the east side of it, when you sayle alongst by it, being but a little off from the shoare, you can not discern this Island from the maine land, but it seemeth to be all whole land, he that is not there verie well acquainted, can not perceive that to be an Island, before that he come close to it, for to runne in behind it. You may sayle into Sweggesound either to the eastwardes of that Island, or to the westwardes of it, according as the winde wil serve. To the westwardes of Sweggesound or the three foresaid rocks, at the west end of the end of the foresaide Island lye a great multitude of rocks and foul grounds.

Eor to saile into the wester channel, you must leave them all on the starboard side, and ruine in betwixt them and the three foresaid rockes: when you come to the ende of these three Rocks, you must loofe up to the southwardes about by them towards the northeast or north, and anckor there in 7 or 8 fathom, there you shall lye landlockt for all winds, but with a storm out of the west the growne sea can come in rowlingh there through. You may also saile in further behind the rocks, untill you come in behinde the foresaid Island, in a little narrow Bay, there men doe lye in 2 fathom & a halfe, or three fathom and also sheltred for all windes. In this Haven of Sweggesound the ships commonly doe lye there to tarrie for the winde. He that is bound to the westwardes, may runne out to the southwardes of the three foresaid rocks, and he that is bound to the eastwardes, may saile out to the northwardes, through betwixt the Land and the Island, but that channel is verie narrow, and not above two fathom deep.

A halfe league to the eastward of Sweggesound lyeth the haven of Bremfnes, a little quarter of a league within it on the starboard side standeth a little church, with some houses, which you shall espie behinde a point, when as you are come somewhat within, there dwelleth the Governour of Normer Leen. Men were wente to come to anckor there to paye custome, but now the Kings Customer dwelleth over against it in little Fossen, so that now at this present, men may eyther goe there, or to little Fossen for to paye there custome, according as occasion doth serve.

For to anckor before Bremfnes, you must looke out for two beackons, which stand by the church upon the water side, thwarte of the innermost is the best Roade, and also the best ground, let your anckor fall there, in twentie, fifteen, eight or tenne fathome that is neare by the shore, for there it is verie steep rising ground, and make you fast with a hawser to the beackons, there you shall lye landlockt for all winds, you may not also anckor no where thereabouts, then in the foresaid place, by reason of the great depth, and verie steepe grounds.

Little Fossen.

Little Fossen or Fossound is a narrowe haven, lying to the northwardes, over against Bremfnes, betwixt two lands. In these two places lie the ships commonly to tarrie for the wind, they that are bound to the eastwardes before Bremfnes, and they that are bound to the westwardes in Little Fossen. Men may also saile from Fossen to the eastwardes, through betwixt the foresaide land, and come into Stangwixfoerd againe in roome into the Liet of Dronten, but is a verie narrow channel, and not wel to be done for them which are not there verie well acquainted.

FleToni d

Three Fleffen.

Westnorthwest, from the haven of Bremfnes goeth a channell through the rockes called Fleffound, after three round Rocks, called three Fleffen which lye in a rowe without the east side of this channell, & thereby is very good to be knowne, A little within the three Fleffes, lieth a great black flat rock, when you are by or in Havens-mouth of Bremfnes is lyeth westnorthwest, or somewhat more northerly from you. For to runne out from thence at that channell, faill right with the foresaid black rock, and runne to the southwardes of it close alongst by it leaving it and the Fleffes on the starboard side,

(to the northwardes of this flat rock and the Fleffe it is all full of rocks, some above and somunder water) you shall then leave on the larboard side of you, two other round rocks, which you shall see lye about a shot of a cast peece eastnortheast, or northeast, and by east one from the other. When you are come without the Fleffes, you shall be without all the rocks, but some what to the westwardes of them lieth a great row of rocks, lying westnorthwest a good wayes into sea, you may runne westnorthwest alongst by them unto the end: when you are come without the Fleffes you may set your course somewhat more northerly, for to get sea room betimes. In this foresaid channell there is no danger, that can hurth you, but you may see it. In the offing you may know this foresaid channell, by the foresaid three Fleffes.

The markes for to finde Fleffound, comming in out of the Freeckolj sea, are two high Hills, the one called Freeckhol, lying upon an Island, towards the southeast, not farre from Bremfnes, the other called Northorne, lying farre within the land Freeckhol is a hill with two hommocks where of the southermost is the smallest and lowest. Northorne is a hill much higher, with a sharp toppe, and lye alwayes white, covered with snowe. When this hill and the foresaide southermost Hommock of Freeckhol stand one in the other (then they are southeast and by south from you) and that you saile in right with then, you shall without fail fall right open before Fleffound. It is a channel of a short inlet, and very commodious, as also Grypsound for them which comming from Dronten, Edou, or any other place in the Lieth, and before night can not saile to the channells of the black Oxe or Vogel, for to runne through them into sea.

About a quarter of a league to the eastwardes of Bremfnes lyeth Stangwixfoird, a large broadsound, at the east point lyeth a great many rocks, within lyeth a Haven, called Hammerfound, you may not come in there but with a Pilot except you be there extraordinari well acquainted.

A quarter of a league within that foresaid point, on the north side of Stangwixfoerde lye two lade places, Iorian wach and Lynwach, men runne in there to the northwardes, behinde some rocks, but it is also Pilots water.

Towards the southeast from Iorianwagh, men may saile farre within the land, into many divers founds, Stangwixfoird, Schelwixfoird, Northfoird, Walsfoird, Wenningfoird, and other more. Upon the lande of Iorianwagh lyeth the mountaine off Toester, in two hills, to the eastwardes of it upon the next land lyeth the mountaine of Stadebuye, also in two hills, as Toester. These hills of Toester and Stadebuye, when you come from the westwardes alongst the Liet, lye right behinde one the other and seeme then to be no more then one hill, but being thwart of them in the Liet, or at sea, each sheweth in two, which is together foure very high hills, and are commonly called together without difference Toester Poester.

Betwixt Toester and Stadebuye runneth through a narrow Sound, into the Northfoird, called Soolfound. To the east of Stadebuye runneth also another sound through into the Northfoird, called Emmerfound, within which on the north side, close by the northfoird is a lade place, where men doe lade good deales.

A quarter of a league in the Liet, to the eastwardes off Emmerfound, runneth in another sound, at the entrie broad and wide, within it dividerh it selve into two partes. Sayling in there you must leave Fisholme and the Yellowe Island on the larboard side, and a rockie Island, called the flat Island, with manie Rocks on the starboard side. The Yellowe Island is not well to be discerned from the main land, for those which are not there well acquainted, the end of the Northfoird runneth there about behind it and maketh it an Island. The Norwazebarkes runne much thereabout behinde it. To the southwardes of the flat Island lyeth a Rock or little Island, called Flatholm, betwixt them both is good anckoring in 10 or 12 fathom, landlockt for all winds.

Through this founde men doe runne into Eurfound, a lade place lying in the Northfoird, there standeth a little church on the west side of the flatte Island Betwixt the little Island is also a good haven, where men may lye in three, foure, and five fathome, it is not broad but cleane. To the eastwardes of this Yellowe Island lyeth the high land of Dromfnes, From thence eastwardes, further up into the Liet, towards Dronten or Agenes, it is most all whole land, and not so broken, as to the westwardes of it.

Thwarte of the rocks of Hammerfound (lying on the east side of Stangwixfoird) lyeth a faire channell called Grypsound, one of the best channells for to come in out of the sea in the Liet it is aboute a quarter of a league broad, and goeth close to the eastwardes of the Island Grype.

Grype

Gryp. Grype it a little rounde Iland lying from the Voghell north-east and by east distant aboute seven leagues, upon it dwell manie Fishermen, whch goe from thence to sea, to fish upon divers bancks, of fortie, fittie, seventie, eightie, and hundred farhome, foure, five, sixe, seven, eight and some tenne leagues without the land, which they knowne to finde by markes on the shoare. On the north side of Grype there lye but two or threc rocks close to the shoare, some saye that there about is anckor grounde in twelve fathom. On the south or west side, it is full of Rocks, but they lye most above water. Aboute halfe wayes betwixt Grype and three Flesses, some what without al the other Rocks, lyeth a suncken rock a little under water he that runneth alongst without these rocks, must be mind full thereof.

Gryp found. For to goe into Grypesound comming in out of the Sea, you must bring the high Mountain of Toester Poester eastsoutheast from you, and sayle in right with it, and so you shall not sayle to runne in sight of the Iland Gryp, which is good to knowne from the other rocks, by the greate manie Fishermenes houses, which stand upon it, and upon no other Iland nor Rocks thereabouts, leave that Iland on the starboard side, and goe in first eastsoutheast right with Toester, being past the Iland Gryp, bringe Toester two points on your larboard bowe, and goe so in southeast, and you shall come in to the Lieth betwixt Hamersound and Toester. From thence to the little Iland Edou are about foure leagues. About three leagues to the westwardes of it, or a league to the eastwardes of Gryp-sound in the Liet, lieth also a suncken rock, almost even with the water, and almost amidst the farewaye, nearest the north side, you may alwayes see the sea breake upon it, leave it on the larboard side, and runne to the southwardes of it, there it is broadest, you may for neede run also to the northwardes of it through betwixt it and the other rocks, but it is there narrow.

Edou. Edou or Edoe is a somewhat low plain Iland, a league long, and verie narrow, which is the first land out the larboard side, upon the Liet, that men have shelter off from the sea, to the westwardes of it, there is nothing but broken land, Rocks and little Ilands, where the growne sea cometh roling in through. Not farre from the west end, upon the south side of Edou, standeth a little white Church, thwart of it, or a little to the eastwardes of it, men may anckor in eight, nine, tenne fathome. The shoare is steep ryfing ground: If men doe come neare it in foure fathome, they shall be presently fast, but the ground is soft. When as men come from the westwardes, and will anckor there, they must (comming neare the west end of the Iland) continually feele with the leade for the anckor ground, and so soone as they feele it, let fall their anckor, thwart of the aforesaide little white Church, or a little to the eastwardes of it so that the little Church come to stand over the houses. When as let fall their anckor in tenne fathome, and wending up towards the land, verie out the cable then the shippe shall come to lye there in sixe fathome, the Liet is thereabouts aboute a halfe league broad.

Kurou. Upon the east end of Edou is also a little haven called Kurou, and it is so litle that there can lye no more then two or three shippes, there lyeth a little black rock not farre from the shoare, men doe runne in betwixt that little rock and the Iland, and anckor betwixt them both there men lye landlockt for all winds, but the ground there is not cleane.

Glasen. At the east end of Edou lyeth another Iland somewhat long, called Glasen. To the eastwardes of it runneth a great broad Sound into sea, called Ramssioird, but it is known of few. With northerly winds there cometh through a great growne sea into the Liet.

Highland of Hitteren. To the eastwardes from Ramssioird lieth the land of Hitteren, two greate long Ilands, Norther Hitteren, and Souther Hitteren, together about seven leagues long, so that he that sayleth up the Liet thwart of them, can not perceive otherwyse, but that he sayleth in betwixt two maine lands. At the south end or west end of Hitteren, which is on the east side off Ramssioird two litle Ilands, called Weroy, there you may sail in betwixt them, and anckor in good white sand ground, you may also sayle through betwixt the little Ilands, alongst into the Liet, and then you leave a suncken rock lying on the starboard side, by the southermost litle Iland.

Dromsnes. From the Iland Edou to the Highland, or the pointe off Dromsnes it is northeast and by east and east northeast distant about three leagues. To the westwardes of that point, to wete, betwixt that point and the land to the westwardes of it called Schipnes, lyeth a haven called Schaerfwyke. In the mouth off this haven, about the midst of the channell, but somewhat nearer Schipnes then Dromsnes, lyeth a suncken rock, which falleth drie at low water, you may runne in aboute it on both

sides. A litle within the point, on the south side standeth a Countiemans house, before which you may anckor in five, sixe or seven fathom, cleane rising ground, which you may come neare by your leade. This haven lieth about a league more to the eastwardes, then Ramssioird, on the south side of the Liet, fitte for to come to anckor in, for those which can sayl no further by day. To the westwardes of this foresaid haven Schaerfwyke alongst the land of Schipnes, lye maine Rocks by the shoare, some above and some under water, therefore you must somewhat shunne the south shoare thereabouts, but the north shoare alongst by Hitteren is verie cleane. The Liet is thereabouts a great halfe league broad.

Aboute five leagues to the eastwardes of Schaerfwyke, on the north side of the Liet, lye the two Ilands of Lexen, to wete, Norther and souther Lexen, which are together about a halfe league long. There the Liet lyeth betwixt both eastnortheast, and northeast and by east.

In souther Lexen is a baye, before which lieth a round rock, making in there within a faire haven, called the haven of Lexen the best haven of all the Liet. Ihon Geurtfon Boogart off Amsterdam, hath (at this owne charges, for the commoditie off ships that come there) caused to be made a great Iron righ:men doe anckor either to the eastwardes or to the westwardes off the foresaid rock, where they will in sixe, seven or eight fathome, and bring a hawser on the foresaid Ring, the further men doe run into the Bight, betwixt the Rocke and the land, the shoulder, it is all clean and clear ground.

At the norther end of norther Lexen is also a place, where is good anckor ground fit for to make road in.

Over against the haven of Lexen lyeth an other haven called Moltow, where the ships doe oftentimes anckor in the Harvest or beginning of the winter, for to set sayle with an eastwinde, because they can hardly get to sayle from Lexen with easterly winds.

A league to the southwardes or to the westwardes of these havens, of Lexen and Moltow, on the south shoare, lyeth a little Iland, whereupon standeth a Warder, called Swanholm which men may sayle round about; under that little Iland it is good anckoring (as well for them which are bound to the eastwardes as to the westwardes) in 4 or 5 fathom good clean sandground.

The south side of the Liet off from Schaerfwyke alongst to Hegwyke, (which is a league and a halfe, and two leagues by west the point of Agenes) is most cleane with little fowle grounds: but from Hegwyke alongst to Agenes the coast is foule and rocky. The north side alongst by Hitteren, as also indifferent cleane; except at the north end lye some rocks called the Terlingen, which lye somewhat off to the southwardes from the shoare into the Liet. A little to the eastwardes of Hemnesioird, over against Hemneschell (an Orchard upon a high land (there the Liet is at the narrowest, and no more then a halfe quarter of a league broad.

Hemnesioird lyeth over against the north end of Hitteren, it is a bay where many Sawes doe stand, and abundance of good fowle Deales are cut and laden.

To the northwardes or eastwardes of the Terlingen, at the north end of Hitteren, in betwixt Hitteren and Lexen lyeth a haven called Deepfound, the Norway Barcks (comming from the southwardes) runne in there alongst behind Lexen to the northwardes.

From Lexen to the point of Agenes on the south side, or to Euriland on the north side, the Liet lyeth alongst eastnortheast, and northeast and by east three leagues. Agenes is the northernmost point of the Liet, you must goe about by it when you are bound to Dronen.

Betwixt Norther Lexen and Furiland lye two Ilands, the southermost is called Fossen, the northernmost Garten, to the southward of Fossen you may sail through alongst into the sea, but not without a Pilot.

For to sayle from Lexen to Agenes, runne alongst by the northshore, which is the cleaneist, the south shore is fowle. A cables length or cables length and a halfe to the westwardes off the point Agenes, lyeth a suncken rocke not farre from the shoare. For to avoid it more other danger, keepe alongst by the north shore (but take heed that you run not in to no bights or bayes) so long untill that you can see the houses upon Agenes, then sayl towards it, and then you shall not sayle within any dangers on the south shoare. On the point of Agenes is also a great Iron Ring for to more the shippes to there by it is deeper and steeper off-going fowle ground. For to anckor, there you must bee very close by the shore before you shall finde ground, and then you must make a cable fast on the foresaid Ring, close to the shore it is about five of sixe fathom deepe foule ground.

On the north side of the Liet over against the point of Agenes,

Euriland. nes, lyeth Euriland, a flat fayre greene land, upon it standeth a little white Church about in English mile off from the shoare within the land, almost like the litie Church of Edou, thwart off it is a good road cleane flat rising sand, and claye ground, men doe commonly ankor there thvart of the first beakon in 7. 8 or 9 fathom good clay ground, 16, 17, or 18 fathom men lye farre from the shore.

Salva With contrary vvindes, or that men cannot come about Agenes, or taken vvith the night, they doe ankor most commonly there.

By Agenes there runneth out alwayes a great strong current to the Westwardes, and by reason the lands from thence to the southwardes on both sides are very high, and the winde (being southerly) falleth there betwixt them both, alwayes strong to the northwards, men can not (in sayling up get any thing there with turning to windewards, but in sayling off they may get much by the current with turbing to windewards.

A little about the point of Agenes on the starboard side, is a great Bay called Salva, wherein is good ankor ground, and good lying, but with northerly winds it is verie hard to com out there for these that are bound out, or to the westwards.

From Agenes to the point of Roobergh, the Liet lieth south-southeast aboute three leagues. About halfe wayes or or somewhat more on the west side lies another bay called Lenswycke where men may haven roade.

Roobergh Roade. Roobergh is a somewhat flat point, to the eastwards or to the northwards about this point is good road in 6 or 7 fathom. A good wayes from the shoare to the westwards of the point, the Norway Backs doe oftentimes ankor, but the ground there is not cleane, and therefore it is no good road for great ships.

Burfen. Bodwyke. Over against Roobergh lye divers Bayes and havens, as Urkedal, Burfen, Bodwyke and other more, where many Deales are cut and laden.

Holm off Dronten. From Roobergh to the little Iland or Holm of Dronten, the course is east three leagues, when you a little past Roobergh, you shall soone espy it against the high land to the eastwards off Dronten, betwixt them both is wide and broad. From the point off Roobergh the land lyeth up to the northwards so farre that at some places men can hardly see over the water.

When you come by the Holm, you may sayle about within it on both sides, you must bring the Holm to the northwards off you, and ankor to the southwards of it in 6, 7, or 8, fathom, according as you lye close to it or farre from, it there is cleane clay ground. The Holm and the Elf, or river of Dronten, ly north and south about a shot off a cast peece asunder, betwixt them both is every where good ankor ground, and depth off 20 and 21 fathom.

About a bow-shot northeast from the Holm lye two suncken rockes, which at low water are uncovered. When as they are even covered with the flood, then you may sayle in over the shouldest of the Barre into the Elf with a ships that draweth 11 foot.

To saile into the Elf off Dronten, it is Pylots water, there stand commonly two or three mafts for beakons, but there is no certainty off them that men may trust unto, for they are oftentimes shifted: sometimes they stand on the east side, sometimes on the Westside, and also sometimes on both sides. When you come a ship's length or two within the beakons you shall come to a chindely point on the starboard side, by which you must luff up to the Kay: upon the Barre it falleth with a spring tyde almost dry, but within it is deeper.

Of the streames on these coasts.

From Stade to Dronten a south and by east and north and by west moon maketh high water, with a spring it falleth a fathom and a halfe up and downe, with ordinary tyde scarce a fathom.

The tydes run not there alongst the land, but the flood falleth thwart on against the land, and the eb to the contrary thwart from the shore to seawards.

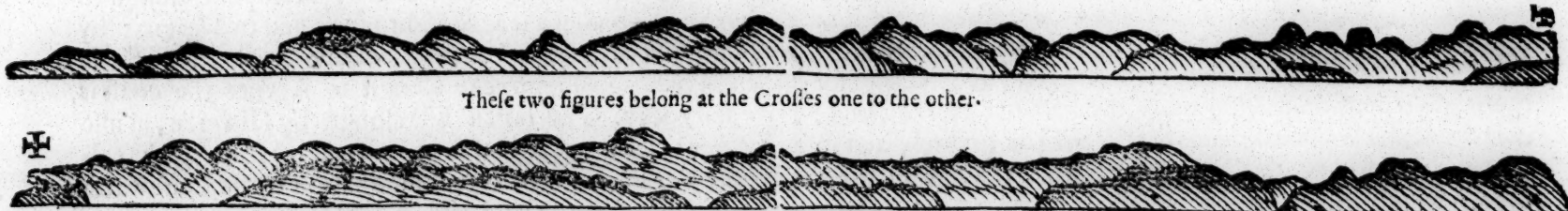
Courses and Distances.

From Stemmeshest to Gryp northeast and by east	7 leagues
From Gryp to the Ilands of Momendall northeast	18 leagues
From Gryp to Holyland northeast and by east	27 leagues
From Gryp to Ruff north and north and by east	64 leagues
From Gryp to the north end of Hicland southwest and by west	125 leagues
From Gryp to the south end of Fero westsouthwest	167 leagues
From Gryp to the east point of Iland west, and west and by north	133 leagues

Of the heights of the lands.

The Ilands Whirholme and Smeerholme lye in	63 degrees 44 minutes
The Iland Gryp in	64 degrees
The town Dronten	64 degrees, 34 minutes

How these Lands doe shew themselves at Sea.



These two figures belong at the Crosses one to the other.

The land from Gryp westwards or southwards towards Stemmeshest like these two figures here above, when as you sayle alongst by it seven leagues without the land.

The ninth demonstration.

In which the east side off England and Schotland, is sheweth, from the River off Londen to the Newcastle.



Two wayes men may sayle into the river of Londen, from the southwards alongst by the north Forland, and from the northwards alongst by the Naes. If you will saile in there from the southwards, then you must first shun the North For land, it is there should a good wayes from the shore, bring the North Forland also not more southerly from you then southwest, that you do not run on against the north grounds, which lye farre to seawards. Comming by the land, run alongst by it, but come not to neere it, that you leese sight of the spyre of the steeple of Margat behind the land, for then you should come to neere it; but if you keepe so far from the shore, that you can see the foresaid steeple above the high land, or keepe it even in your sight, then you can not take hurt of the south grounds. Comming thwart of Margat, then you are past foresaid shoulde or south grounds. Run then boldly rewarde the shore, and within two cables lengths alongst by it, for to avoid the north grounds, which lye farre to the southwards the land. Sayle on so west all alongst by the shore, untill that the Roculvers (which are two steeples upon one Church) come one in the other, and then you shall run in sight of the first buye upon the Lasts, which lieth upon the foresaid markes of the Roculvers, being by it you can also see the other buy which lieth like as the first also on the north side, & over against it on the south side standeth a beakon, there you must saile through betwixt them both leaving the buye on the starboard side, and the beakon over against it on the larboard side. From

thence you may with little shippes, or shippes of little draught, but not with ships of great draught, at high water run over the Swallow on westnorthwest towards Scheppy, for it is there should water, with ships of great draught you must run through the Fishers deep towards Black-tayle. You may also runne from Margat with small shippes alongst by the shoare upon the lead at high water even unto Sheppy, but in sayling alongst there you must east your tydes well, for the flood falleth very strong into the Swallow, and the ebbe to the contrary very strong out.

When you come by Sheppy, runne within two cables lengths alongst by it, for to avoid the taile of the Spanjard, untill that you be past Quinsbrough, edge then off from the south shoare for to avoid the Noere, which is a sande that shooteth off from the south point of the River a good wayes to the eastwards, upon the outermost end where of standeth allwayes a beakon, whereby you may know it. Run alongst to the northwards of it, leaving on the larboard side, & alongst in the middle of the channell into the sea reach for to avoid the grounds which lye off from the north shore, goe in so alongst towards Gravesand.

To sayle with shippes of great draughts alongst by the north Forland up into the Thames, you must (when you are past the buyes upon the Lasts) sayle through the Fishers deep, towards Black-tayle, which lyeth from the second buye upon the Lasts, unto the first buye in the Fishers deep, northwest and northwest and by west, which lyeth upon the north side of the sand, which men doe call the Spanjard, those two buyes lye a great wayes one from the other.

Sayling from the buye upon the Lasts it is a great wayes all should

Roculvers

Scheppy
The Spag-
mard.

The noere,

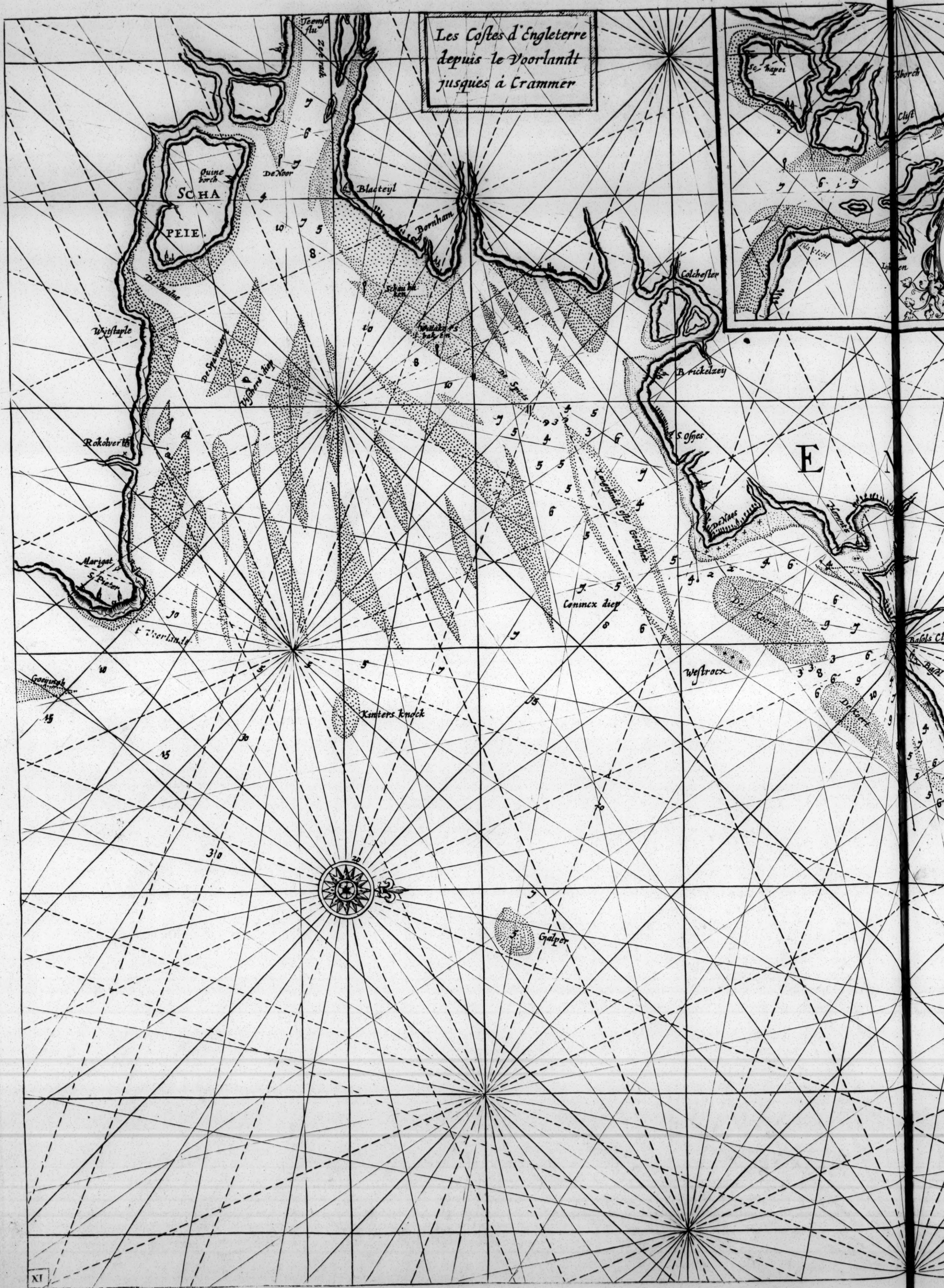
Fishers
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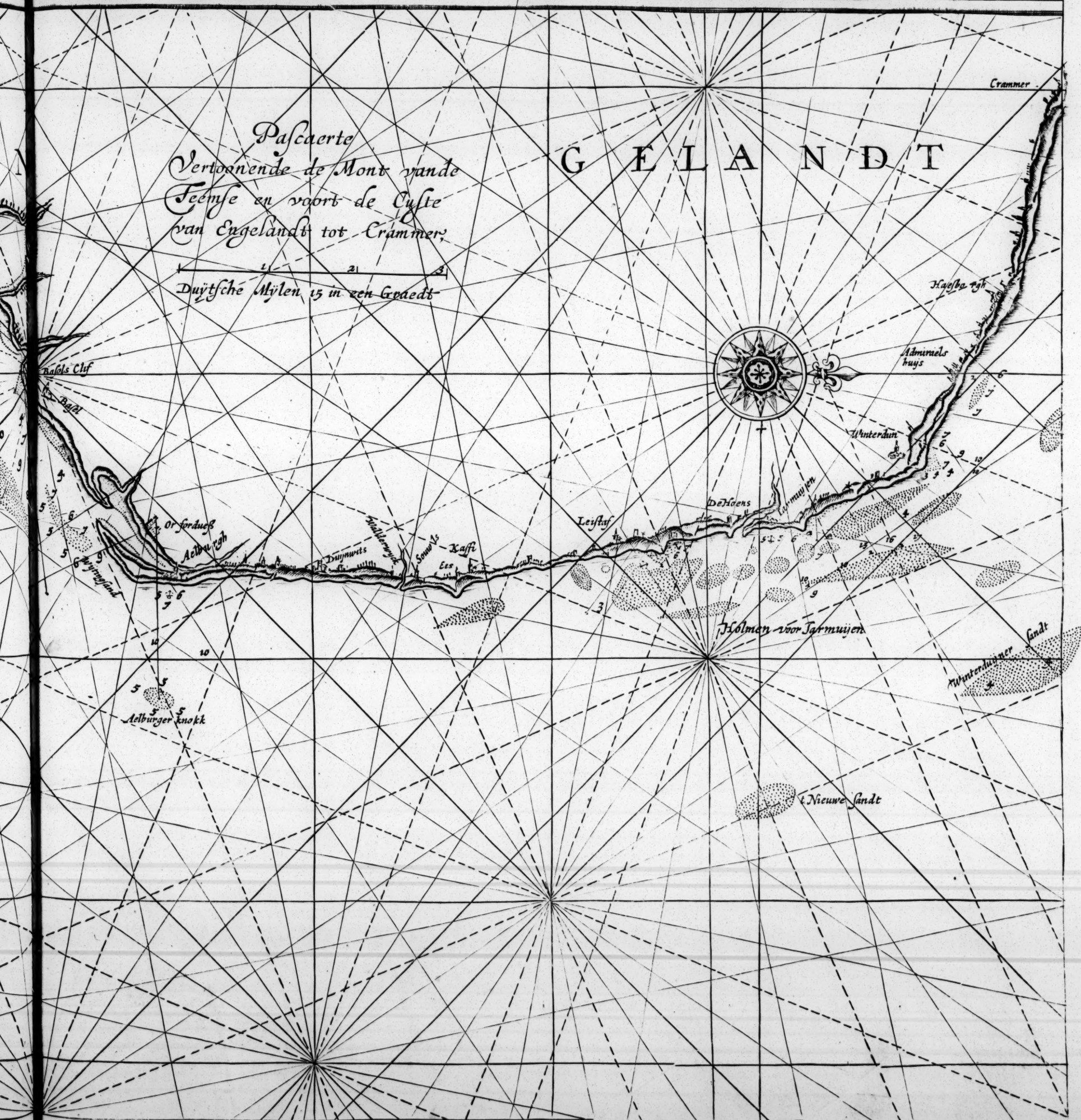
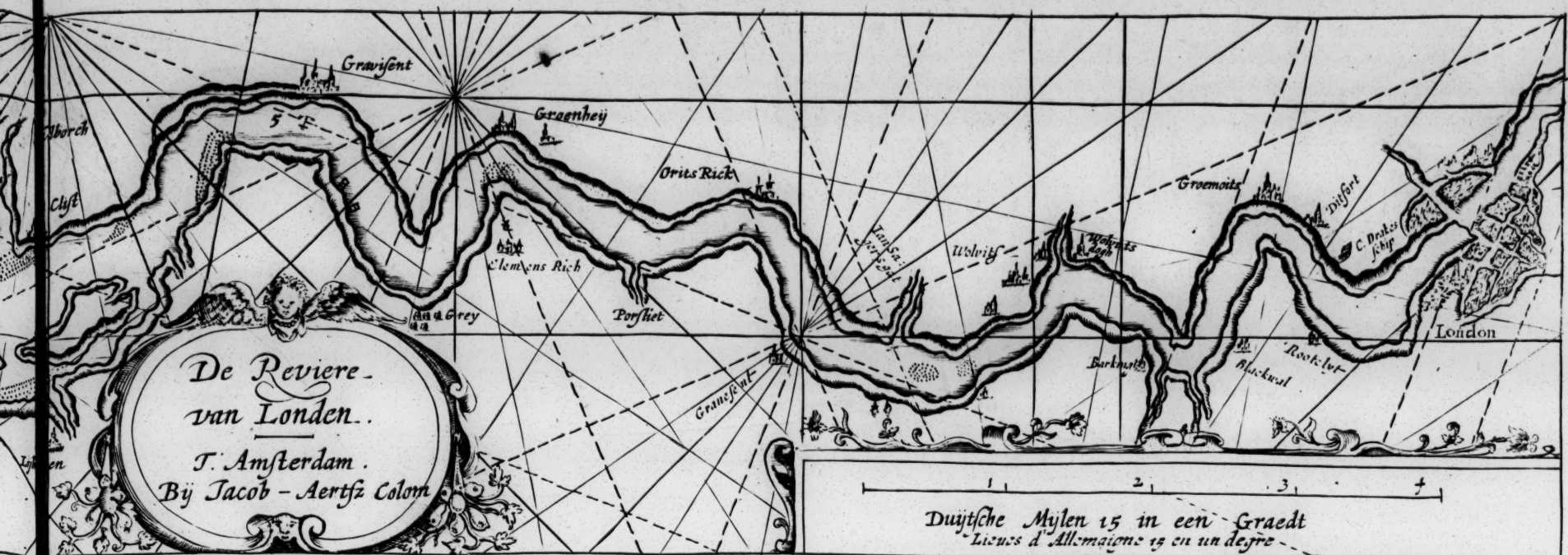
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Les Costes d'Angleterre
depuis le Voorlandt
jusques à Crammer





for to fail
into the ri-
ver of Lon-
don from
the north
wards.

Sowle
Dunwich

Albrough

Orford
res.

Albrough
rock.

Whiting
sand.
The Cou

should water, so that you must runne over there with high water, but comming neare the baye upon the Spanjard, it is by litle and litle deeper water. He that will saile over heere, must reckon his tydes well, the flood falleth there alongst towards the south west almost thwart over the deepe and the ebbe to the contrary.

The second buye in the Fishers Deepe you must leave on the starboard side, and the buye upon the Spanjaerd on the larboard side: being past that, you come against the Blacke tayle, to the southwards of the Shoebeakon into the right deepe. The eastpoint of Sheppy shall then lye about south from you. From the Shoe-beakon the course is south west to the point of Blacktaile, there runneth of a hooke which men might (at unawares) sail within (comming from the northwards) in five or six fathom, but if you keep from the shoare in seven fathom, you can not saile within it. From Black-taile to the beakon upon the Noere, the course is westsouthwest, leave it on the larboard side, as before is said, and runne in alongst the river, in the middt of the channell betwixt both lands into Gravefond.

For to saile into the river of London comming from the northwards, you must come neere the coast to the northwards of Orfordnes which is to the northwards of all the sands, there lye Albrough, Dunwich Walderswike, Sowle and Covehit, all betwixt Orfordnes and Leystaf. Covehit is sharp steeple like at also Leystaf, but Sowle and Walderswyke, Albrough and Orfordne sare all flat steeples Sowle and Dunwich lye both upon the high land, betwixt them both is a valley, therein you may see Walderswike when you are thwart of it. Dunwich is the best to be knowne of all these foresaid places: it hath two flat steeples, and on both sides some trees. To the southwards of it lieth Albrough which is also very good to bekowne, it hath one high flat steeple with three mills, the two stand to the northwards, and the third to the southwards of Albrough when you are thwart of it, but sayling to the southwards, they come at last all three to the southwards of it. The land without Albrough, and the southwards of it is very low flat and chindely land.

Betwixt Albrough and Dunwich about half wayes betwixt them lieth a Wood which is a both end high, & in the middest low with a saddle; this you shall commonly see first, when you fall with the land thereabouts, and is the best to bekowne for to know the coast by, the land without it, and to the southwards is very low flat chindely land. About two leagues to the southwards of Albrough lieth Orfordnes, betwixt them both stand also two woods of trees, which shew them selves a farre off like castles or towers. Orfordnes is a flat steeple with a thik or broad castle, which hath also a thick flat steeple, almost of fashion like the steeple of Rarop, open aboven with holes in it like Bellholes.

Before Dunwich you may ankor, there is good lying in eight or nine fathom, somewhat soft ground. Before aelbrough is the best road of all the coast thereabouts in 6 and 7 fathom.

East from Aelbrough about two leagues lieth Aelbrough Knock, this is a sand which at low water is not deeper then seven or eight foote: you may found round about it in five fathoms, but is not good to come nearer it. which sea winds you may discern it plainly by the breaking of the sea upon it; but with landerly or westerly windes, and faire weather, the sea breaketh not upon it, hee that runneth thereby to the northwards with an eb, shall see it commonly ripple very much upon it, like as upon most the English bancks, and not indeed the upon banckes, but against them, for upon the shouldest or middest of the banckes is alwayes the smoothest water, like as you finde every where.

When as Aelbrough is west from you, and the two steeples of Orfordnes are one in the other, there you shall finde Aelbrough knock. These are sure marks of that sand.

The Whiting, or Whiting sand, is somewhat a long small sand lying before Orfordnes, and the chindely land to the southwards of Aelbrough, and lyeth alongst the reach, but the south end lieth further from land then the north end, there is at low water not above six or seven foot water upon it. Comming from the northwards, men saile commonly to the westwards of it, that is through betwixt the land and Whiting-sand, towards the Naze. Men may also saile alongst to the eastwards of it, through betwixt Whiting-sand and the eastermost point of the Court, or Court-sand, which some doe call the Rib.

The north end off the Whiting lieth alongst close to the shore, and lieth from the steeples of Orfordnes southeast and by south, it is so exceeding steepe and needle to, that you shall have the one cast nine, the next cast five fathom, and then you

are no more but a ships length from it, before you can heave the lead again you should be upon it. When as you sit with the foreship against it, it is at the stearne five or six fathom deep.

Alongst the Inner-side, it is also everie where so steepe, that you can not founde it, but on the outhier side you may runne alongst by it in five fathom upon the lead, untill you come within the sands.

When as you come from the northwards and will saile through whithin the Whiting, you must run close alongst by the shoare, and south west about by the point of the chindle to the southwards of Aelbrough, untill you come within the north pointe of the Whiting, when the steeples of Orfordnes come to be north west and by north from you, then you are right thwart of the north point of the Whiting, being within it goe againe more southerly; to wete, south west and by south towards Balsy cliffe.

If you should fall to the southwards of Whiting, or els comming from the southwards will saile in there to the northwards then bring the steeples of Orfordnes westnorthwest or northwest and by west, but for all not more northerly then northwest from you, and saile so right in untill you come by the Chindle strand, then run in alongst by it, as is before saide, and then you shall run far enough alongst to the northwards of the Whiting.

If you will saile in to the eastwards of the southwards off the Whiting, then bring the steeples of Orfordnes northnorthwest, or northwest and by north, or northwest from you, and saile in so right with them, untill that the wood of trees, that standeth upon the nexte pointe to the southwards of Balsy cliffe, come to Balsy cliffe, which shall then stand aboute westsouthwest from you, keepe that a foresaid woode to the southside of the cliffe, and saile in bouldly right with it, and then you shall runne right in the farewaye, in betwixt the Whiting, and the tayle of Courtesand, but if you bring the foresaide trees more then a handspikes length without the cliffe, you shall not saile to runne on against the pointe of the Courte. That afore said wood of trees is verie good to be knowne, because there abouts stand no other trees.

Or bring the steeple of Balsy westsouthwest from you, and saile in right with it, untill you come by Whiting-sand, in five or six fathom, and leade it in so by it upon the leade, untill that you come by Balsy, or that you get deeper water.

When you come neare Balsy, whether you be come in from the northwards, or the southwards, of Whiting-sand, you must keepe somewhat off from the shoare because off a litle riffe or small tayle, that shooteth off from the shore, thwart of Balsy cliffe, which you must avoide somewhat, with shippes of greate draughts, there remaineth at lowe water upon it no more then two fathome, you may commonly perceive it well by the rippling of the tyde.

You may also saile into the southwards, of the Ribbe (that is, the rayle of the Courte or Courte-sand) thus: Bring the steeple of Balsy northnorthwest or a litle more northerly from you, and saile in so right with it, and so you shall runne in to the northwards, to through the Courte, at a channell of eight fathome depth, the east side of this channell is steepe, come no nearer it then eight fathom, but by the west side you may run in aboute by the Court, upon the lead, untill you come within the sands.

Balsy hath a high flatte steeple, and lyeth somewhat within the land behind the clif, when as you come from the northwards, you may see Balsy to the northwards or the westwards, of the cliffe, but you saile it altogether behinde the cliffe, so that at last it commeth out againe to the southwards of it.

If you will saile to Harwich being past Balsy, then bring Balsy to that steep-point to the southwards of Balsy where trees stande upon, keep these markes so standing, and run so alongst by the shoare, untill that you be over the point of the Chindle, the markes thereof are two high trees within the land, when they are aboute northnorthwest from you, then they come one in the other with the steeple of Harwich, and then you are right over the pointe of the Chindle, and then you shall get deeper water, to wete, foure and five fathome, or somewhat more against the highest water. Runne in then aboute by the pointe, the channell lieth in right north, but in the midst of the havens mouth liet a suncken rockie and stonie ground, which you must avoide, you may saile in aboute it on both sides, by the one shoare or the other, but alongst by the east shoare it is best, being within it, you can not saile amisse, to take hurte, if you do not saile bluntly against the shoare: there you may ankor al over, where you please, before the towne, in five six and seven fathome. You may well also goe further into the bight, there it is clean everie where. The farewaie betwixt

For to sail into the river of London from the northwards.

Sowle Dunwich

Albrough

Orfordnes

Albrough Knock

Whiting sand, The Court

For to runne into the eastwards off the whiting.

For to sail in at a channell through the Court

Balsy

For to sail into Harwich

twixt Ordforne or Whitingland and the Naes lieth most S. W. and by S. and is 6, 7, and 8 fathome deepe, in turning to Windewards, you may run to the shoare in 5 and 4 fathome, but close to the sands it is deeper, to wete, 8, 9, and 10 fathome, the nearer the sands the deeper Water.

The Naze. But for to saile from Bolsy to the Naze, you must marcke the steeple of Balfi, when it commeth within a capstone barres length neere to the S. end of the cliffe, then keep them so standing, so long untill that the house upon the Naze come over the two fields, which lye on against the High land, or come over a blak head upon the sea side, saile then right in with them, untill that the steeple of Harwich come to be N.N. W. from you in the litle valleie of a redde cliffe, leave then the first markes, keepe the steeple of Harwich in that litle valleie, and goe on southsoutheast, untill that the thirde pointe off the Naze come without the 2 other points, so you shal run throug betwixt the Naze and the course, there remaineth at lowe water no more then eight, tenne, and at some places twelue foot water, therefore it is not good to run through here, unlesse that it be a quarter floude or with a shippe of greate draught at halfe floude, there it is verie uneven of grounde roekie and stonie, The pointe of the Naze is verie stonie, foule and uneven, the nearer the shoare thwart of that point the shoulder, but the nearer the Sands the deepe.

Longland. When that the third point of the Naze commeth without the two other points or the other land, and that it doth againe beginne to deepe of, to wete, foure or five fathome then go S. W. somewhat southerly, or southwest and by south, unto the buye upon Longland. Thwart of the Naze is Longland verie steepe, so that it can not be wel founded with the lead by them that are not there verie wel acquainted, but somewhat more to the southwards, you may run alongst by it in 4 fathome and 3 fathome and a halfe, untill that you get the buye upon Longland in sight of you. The northshoare to the southwards of the Naze is also flat, you may runne alongst by it also upon the lead, without any daunger.

Buyes upon Longland and the Spits. The buy upon Longland lieth in two fathome and a half at half floud, you must leave it on the larboard side, and the buye upon the Spits, on the starboard side, which lieth a litle shoulder, they lye about south and by east and north and by west, a musket shot one from the other. The course betwixt the two buyes is S. S. E. and N. N. W. but you must reckon well your tyde, wheter you run through there with a floude or with an ebbe. Upon the Spits, betwixt the two buyes is a halfe floude at least 3 fathome and an halfe, or almost 4 fathome, in the right channell, a litle to the southwardes of the buye upon the Spits stand two mastes above water, of a lost shipp, which are good markes. Being over the Spits, the course to Whitakers beakon is southsouthwest.

The Spits. About half waie, betwixt them stand also two mastes more on the same West side, and over against these mastes lieth a middle plate, whereupon lieth a buye on the West side: the fareway is alongst to the westwards off this Middle-plate, through betwixt that foresaid buye and the mastes.

Whitakers beakon. To the northwards of that foresaid Middle-plate, goth out a channell by the south side off Longland, which you may saile out and in, called the Kings-deepe. If you come from Whitakers beakon, past the Middle-plate, so far that you get sight of the buyes of Longland or Spits, goer then bouldly eastnorth-east and northeast and by east into sea, or upon the lead alongst by Longland, but if you should runne into sea, to the southwards of the Middle-plate, you should with an eastnortheast waye fall within the hooke of the Mouse. This Kings-deepe is a readie channell, and is used almost by all shippes for to runne out at.

For to sail into the Kingsdeepe. For to runne in at this channel out of the sea, then bring the point of the Naze N. W. from you, and saile in so with it, untill that you come neare Goemliet or Longland in 5 fathom, goe in then alongst by it about W. S. W. and southwest and by west, and keepe the sounding of Longland, and so you shal not fayle to runne in sight of the buye upon the Spittes and the foresaid mast to the southwards of it.

From Whitakers beakon to the Schoebeakon the course is S. S. W. somewhat westerly, comming thwarte of the Schoebeakon, then lieth the east point of Seppie about south from you. From the Schoebeakon the course is alongst southwest to the point of Blacktayle, there runneth off a Hooke, which men might saile within comming from the northwards: but if you keepe from the shoare in seven fathom, can not take hurte of it, but in five fathom you runne within it. The like Hooke is also a litle to the southwards off the Schoebeakon, which you might unawares saile within, comming from the southwardes.

From Blacktaile to the beakon upon the Nore, the course is Westsouthwest. The Nore is a sand, lying from the South-point of the maine land of the River, farre to the eastwardes, therefore leave the beakon on the larboard side, and goe on West alongst, amidst the channell into the river, betwixt both lands, as here before hath beene said in the description of the Fishers deepe.

From Aelbrough alongst by Dunwich to Covehit the coaste lieth North and by East somewhat easterly, and South and by West or somewhat westerly five leagues, but from Covehit to Leystaf north and south 2 leagues Aelbrough, Dunwich and the sands lying thereabouts, are description here before.

Betwixt Dunwich and Covehit lieth the haven off Sowle Sowle, which is a litle shoulde river, a litle within it divideth it self into three parts, upon the northermost arme lieth Sowle upon the middlemost Walderfwyke, and upon the southermost Dunwich.

Covehit hath a high sharpe steeple, thwart off it lieth a banck not far from land, which falleth almost drye at low water, but at half floud you may saile through betwixt it and the land in three fathome, upon the outh side it is verie steepe, so that you can not come nearer it then 9 or 10 fathom. When the steeple of Easton is westnorthwest from you, then you are to the southwards of the banck, and when the steeple off Covehit is southwest and by west from you, then you are to the northwards of it.

Two leagues to the northwardes of Covehit lieth Leystaf, and two leagues more to the northwards of it lieth Yarmouth. The steeple of Leystaf is a high sharpe steeple, and standeth a greate musket shot within the land from the house, so that in sailing alongst you may bring the steeple on both sides of the houses. Off from Leystaf begin the banck or Holmes of Yaermouth, and lye alongst to the northwards past Yarmouth, untill thwart of Winter ton, there go divers channels through them, which men may sail through, upon divers marcks, for these that are there acquainted, you may saile through within these bancks, off from Leystaf untill past Winter ton.

If you will run through from before Leystaf within these banks, then looke out for the fire beakon which stand by Leystaf, which at two litle white houses, the one standeth beneath upon the chindle on the sea side, and the Innermost upon a litle hommock, somewhat farther within the land. When you come from the southwards, they shew themselves to the northwards of the towne, but come at last thwart of it. In the night there is alwayes fired upon then, for to sail in there also by night. Bring these foresaid firebeakons N. W. and by N. or somewhat more northerly from you and saile in so right with them either by night or by daye, the church of Leystaf commeth then to the southwards of the towne over a Countrie house by the water side, when you come against the channell, there is at low water no more then 3 fathom depth, keep these foresaid firebeakons one in the other, or bring the Innermost rather a litle to the northwards of the outhmost, for to avoid a litle plate, which lieth on the south side of the Deep, but the channell is indifferent wyde, run untill you com against the strand in two fathom and a half or two fathome, so near as you will or can, and go then up northwardes alongst by the shoare, you shal then (being sailed a litle to the northwards) meet with a flat, whereupon remaineth at low water lesse then two fathom depth, with laden ships, you must ankor before that flat and stay for high water, it floweth there aboute eight foot, up and downe, so soone as you are over the flat it will be 5, 6, and 7 fathom deep, edge then to the shoare, and sail toward it, and then you come before the Brewehouse, there is the roade, where you may ankor in 4, 5, or 6 fathome, from thence northward toward Yarmouth alongst the shoare is all over good anckoring and good ground.

About an English mile or somewhat more to the southwards of the towne Yarmouth, is the haven of Yarmouth, is hath two wooden heads, where you must saile in betwixt them both against the highest water, when the strongest of the floud is spent, at halfe floud it is dangerous, because of the strong tyde, which should lightly carrie you into the bight, against the shoare, (against your will) it is also best to runne in alongst by the southerhead, there it is deepest. At Yarmouth in the roade men doe commonly ankor to the northwards of the haven, right thwart of the towne, in 5, 6, 7, or 8 fathom, the nearer you ankor to the sandes the deeper water you shal have, but all good sand and soft grounds.

If you will saile into the Roade of Yaermouth through the Holmes, then bring the sharpe litle steeple, that standeth to the northwards off Yaermouth within the land, over the broad

Schoe beakon. Blacktaile

The Nore

Sowle

Dunwich

Leystaf

For to com within the banks of Yarmouth

Haven of Yarmouth

Roade before Yarmouth

broade castle, or bring the mill to the north side of the towne: keep these marks so standing, and goe in so westnorthwest, you shall find in this channell not lesse water, then eight or nine fathom at halfe flood, this channell is called S. Nickolas channell: on the north side it is deepest being come in, the roade is right before the towne in 5 and 6 fathom.

Thwart or over against the haven of Yarmouth goeth also a channell through the Holmes, for to saile in through there comming from the southwards, then bring Souton over the north side of the haven; the great tree betwixt Northon and that flat little house or Cattle, saile in right with them, and keep these marck so standing, untill that you be within the Holmes, within them lieth a plate on the starboard side, a little to the northwards off the haven, called the Middle ground, you may saile about it on both sides, on the inner side in 5 fathom, but towards the Holmes, or about to the eastwards off it in 8 and 9 fathom.

From Yarmouth to Winterton, the coast lieth north and by West and Northnorthwest two leagues.

If you will sail from Yarmouth forth through vwithin the banks to the northwards, sail along by the land, and keep the sounding off the shore in 5, 6, or 7 fathom, untill that you have the two firebeacons which stand a little to the northwards of Caster, one in the other, sail then right with them, either by day or by night, (in the night there is fired upon them) you shall so run over a flat, through betwixt two buyes, which lye each off them upon a tail off a sand, sail bouldie in with the foresaid firebeacons, untill you come againe neare the shoare, in 5 or 6 fathom, being come by the shoare, run then againe alongst by it, and keepe the sounding thereof as before, al alongst untill you come before Winterton.

Thwart of Winterton runneth off a dangerous rif, which is dangerous to saile about by night, if men doe come to near it, which is upon the end so steep, that (in three fathom or two fathom and a half) you shall not be a ships length off from it. But when as you, (comming from the southwards) keep your self in 6 or 7 fathom, then you can not fail so near to it. To the southwards off that rif upon the land, standeth a firetowre, which is verie good to be knowne, with a firebeacon, and also a little white house, when these come one in the other, then you are thwart of the point of the riffe.

To the northwards off this rif upon the land standeth two vwhite firebeacons, whereupon there is fired by night, for to avoid this rif. When as you come thwart off the point, then are these also one in the other, so that these doe serve for thwart marcks, and the other to the southwards of them for longst marcks, for these that will saile about it from the southwards. Comming from the northwards alongst the shoare in 5 or 6 fathom, untill you come by the firebeacons upon the north side, you must keep somewhat off from the shoare, before they come one in the other, or els you should run on against the rif. When they are one in the other then they stand southwest and by west from you, and when as the firebeacon to the southwards off Winterton commeth to be southwest, somewhat more westerly from you, then you are thwart off the point of the rif: you may not also run about far within that rif, for then you should lightly be foule off the grounds to the eastwards off it, specially when you come from the northwards for there it is not verie wide betwixt them both.

From Winterton to Haesbrough point, the course lyeth northwest 3 leagues.

Betwixt Haesbrough and the Admirals house stands a ruinous tower upon the strand. When as you keep it and the steeple of Haesbrough one in the other comming from the northwards, then you run right upon the point of the foresaid riffe. Eoure leagues vwithout the land lyeth Winterton sand, the south end where off lyeth about east and the north end northeast from Winterton.

Thwart of Admirals house, not far from the shoare, lieth also a little plate where no ship can goe over, but if you goe

in ix or seven fathom, you can not sayle to neare it, you may also runne through in two fathome, betwixt this plate and the land.

From Haesbrough to Cromer, the coast lieth alongst north west and by west, and W.N.W. 3 or 4 leagues.

Of the depts and shoules about these places, and in what depts men may see the land.

Five or six leagues north and by east and northnortheast from the north Forland or from Margat lieth a banck called Kentish-knop, upon it is 3 fathom water, being by it, you may even see the land from below.

Northeast and by N. from the N. Forland 9 or 10 leagues, and about E. from the Naze, eight leagues into the sea, lieth a banck called the Galloper, of 5, 6, and 7 fathom deep.

The westrocks is a stonie ground, lying betweene the Court and Longsand, whereupon is no more then 2 fathom water at a half flood.

Vwithout that sand or Harwich 5 leagues from the Naze, it is 20 and 22 fathom deepe, being there you may see the land.

Thwart of Orfordnes you may see the land from below, in two and twentie fathome.

Five or six leagues without Leystafte and Yaermouth sea and east into sea, it is 17 and 28 fathom deep, there you may see the land.

Four leagues east and by south from land, without the Holmes off Yaermouth lieth a banck, called the Newland, which is not deepe then two fathom.

Eastnortheast at least 7 leagues from land thwart of Yarmouth it is 15 fathom, the ground red grosse sand with little round stones, being there you may even see the land from below.

Thwart of Winterton and Cromer 7 or 8 leagues from the land it is 18, and 19 fathom deep, and there you may see the land.

VWinterton sand lieth 4 or 5 leagues from the land N.E. from VWinterton.

What moon maketh high water at divers places.

At the north Forland a north and south moone maketh high water.

VWithin the Thames a south and by east moone.

Before the Thames, at Harwich and Orfordnes a S.S.E. moone.

At Leystaf and Yarmouth a S.E. moone maketh high water.

VWithout the banks of Yarmouth, and before Cromer, a southeast moone maketh full sea.

Betwixt the banks of Harwich and the Holmes of Yarmouth the flood falleth south, and the ebbe north.

Thwart of the banks of VWinterton and Cromer the flood falleth S.E. and the ebbe northnorthwest.

Of the tydes and courses of the streames.

From the north Forland the flood falleth to the Rocolvers, and over the Brakes w.f.w. and by south.

VWithout about Goodwin towards Kentish knock, the flood falleth north and by west, and northnorthwest there commeth the flood also against it from the northwards, and meet one another by the Galloper, with very great rippling and noyse, (whereof this banck is also called the Galloper) and falleth to the westwards into the sands and channels, and also to the eastwards towards Flanders.

Betwixt the north Forland and Orfordnesse the streame falleth without the sands south and by east, and southsoutheast.

When you are to the northwards of the Galloper, then you can reckon no ebbe, then that which runneth alongst England to the northwards, the streames fall there all alongst the coasts. To the southwards of the Galloper, the ebbe goeth to the contrary, to the southwards, and the flood to the northwards.

Courses and Distances.

From the north Forland to the north end of Goodwind the course is south and by east _____ one great league

From the north Forland to Kentishknock northeast and by east and N. N.E. 4 or 5 leagues

From thence to the Orfordnesse north _____ 12 leagues

From the north Forland to Galloper n.e. and by north _____ 9 leagues

From the Galloper to Orfordnes northwest _____ 9 or 10 leagues

From the north Forland to the Wielings, the course is east somewhat northerly about _____ 27 leagues

From the north Forland to the Mase the course is eastnortheast or somewhat more easterly about _____ 33 leagues

From the north Forland to the Tefell or Marsdip northeast _____ 45 leagues

From the Naze or Harwich to the Mase east _____ 29 leagues

From Orfordnes to Tefell eastnortheast _____ 39 leagues

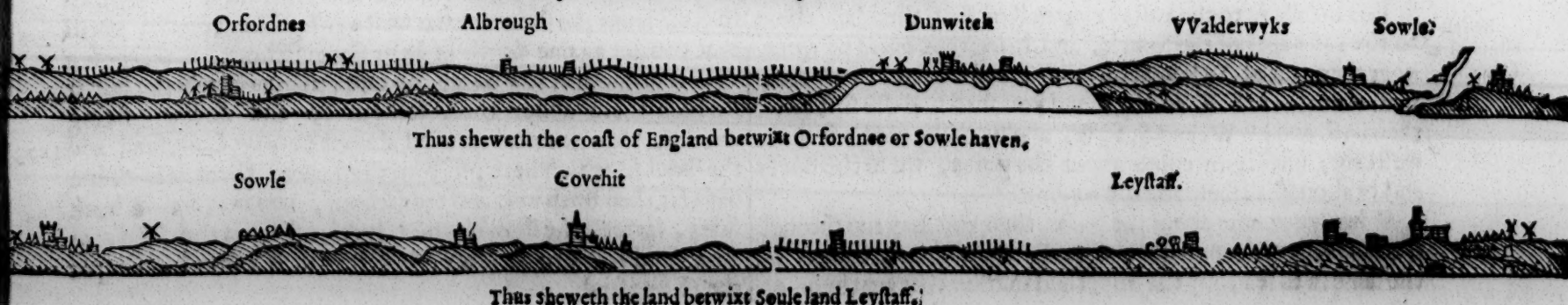
From Yarmouth to Leystaf to Walcheren or the Wicklings southeast, and south east and by south _____ 38 or 40 leagues

From the point of Cromer to Schield. to the Tefell, the course is east 40 or 42 leagues.

Of the heights of these lands,

The north Forland lieth in _____ 51 degrees 25 minutes
Orfordneslieth in _____ 52 degrees 12 minutes

How these lands doe shew themselves at Sea.



twixt Ordforne or Whitingland and the Naes lieth most S. W. and by S. and is 6, 7, and 8 fathome deepe, in turning to Windewards, you may run to the shoare in 5 and 4 fathome, but close to the sands it is deeper, to wete, 8, 9, and 10 fathome, the nearer the sands the deeper Water.

The Naze.

But for to saile from Bolsy to the Naze, you must marcke the steeple of Balsi, when it commeth within a capstone barres length neere to the S. end of the cliffe, then keep them so standing, so long untill that the house upon the Naze come over the two fields, which lye on against the High land, or come over a blak head upon the sea side, saile then right in with them, untill that the steeple of Harwich come to be N. N. W. from you in the litle valleye of a redde cliffe, leave then the first markes, keepe the steeple of Harwich in that litle valleye, and goe on southsoutheast, untill that the thirde pointe off the Naze come without the 2 other points, so you shal run throug betwixt the Naze and the course, there remaineth at lowe water no more then eight, tenne, and at some places twelve foot water, therefore it is not good to run through here, unlesse that it be a quarter floude or with a shippe of greate draught at halfe floude, there it is verie uneven of grounde roekie and stonie, The pointe of the Naze is verie stonie, foule and uneven, the nearer the shoare thwart of that point the shoulder, but the nearer the Sands the deepe.

Longland.

When that the third point of the Naze commeth without the two other points or the other land, and that it doth againe beginne to deepe of, to wete, foure or five fathome then go S. W. somewhat southerly, or southwest and by south, unto the buye upon Longland. Thwart of the Naze is Longland verie steepe, so that it can not be wel founded with the lead by them that are not there verie wel acquainted, but somewhat more to the southwards, you may run alongst by it in 4 fathome and 3 fathome and a halfe, untill that you get the buye upon Longland in sight of you. The northshoare to the southwards of the Naze is also flat, you may runne alongst by it also upon the lead, without any daunger.

Buyes upon Longland and the Spits.

The buy upon Longland lieth in two fathome and a half at half floud, you must leave it on the larboard side, and the buye upon the Spits, on the starboard side, which lieth a litle shoulder, they lye aboute south and by east and north and by west, a musket shot one from the other. The course betwixt the two buyes is S. S. E. and N. N. W. but you must reckon well your tyde, wheter you run through there with a floude or with an ebbe. Upon the Spits, betwixt the two buyes is a halfe floude at least 3 fathome and an halfe, or almost 4 fathome, in the right channell, a litle to the southwardes of the buye upon the Spits stand two mastes above water, of a lost shipp, which are good markes. Being over the Spits, the course to Whitakers beakon is southsouthwest.

Whitakers beakon. Middleplate

Aboute half waie, betwixt them stand also two mastes more on the same West side, and over against these mastes lieth a middle plate, whereupon lieth a buye on the West side: the fareway is alongst to the westwards off this Middle-plate, through betwixt that foresaid buye and the mastes.

Kingsdeepe

To the northwards of that foresaid Middle-plate, gothout a channell by the south side off Longland, which you may saile out and in, called the Kings-deepe. If you come from Whitakers beakon, past the Middle-plate, so far that you get sight of the buyes of Longland or Spits, goer then boldly eastnorth-east and northeast and by east into sea, or upon the lead alongst by Longland, but if you should runne into sea, to the southwards of the Middle-plate, you should with an eastnortheast waye fall within the hooke of the Moufe. This Kings-deepe is a readie channell, and is used almost by all shippes for to runne out at.

For to sail into the Kingsdeepe.

For to runne in at this channel out of the sea, then bring the point of the Naze N. W. from you, and saile in so with it, untill that you come neare Goemstet or Longland in 5 fathom, goe in then alongst by it about W. S. W. and southwest and by west, and keepe the sounding of Longland, and so you shal not fayle to runne in sight of the buye upon the Spittes and the foresaid mast to the southwards of it.

From Whitakers beakon to the Schoebeakon the course is S. S. W. somewhat westerly, comming thwarte of the Schoebeakon, then lieth the east point of Seppie about south from you. From the Schoebeakon the course is alongst southwest to the point of Blacktaylor, there runneth off a Hooke, which men might saile within comming from the northwards: but if you keepe from the shoare in seven fathom, can not take hurte of it, but in five fathom you runne within it. The like Hooke is also a litle to the southwards off the Schoebeakon, which you might unawares saile within, comming from the southwardes.

From Blacktaylor to the beakon upon the Nore, the course is Westsouthwest. The Nore is a sand, lying from the South-point of the maine land of the River, farre to the eastwardes, therefore leave the beakon on the larboard side, and goe on West alongst, amidst the channell into the river, betwixt both lands, as here before hath beene said in the description of the Fishers deepe.

From Aelbrough alongst by Dunwich to Covehit the coaste lieth North and by East somewhat easterly, and South and by West or somewhat westerly five leagues, but from Covehit to Leystaf north and south 2 leagues Aelbrough, Dunwich and the sands lying thereabouts, are description here before.

Betwixt Dunwich and Covehit lieth the haven off Sowle which is a litle shoulde river, a litle within it divideth it self into three parts, upon the northermost arme lieth Sowle upon the middlemost Walderfwyke, and upon the southermost Dunwich.

Covehit hath a high sharpe steeple, thwart off it lieth a banck not far from land, which falleth almost drye at low water, but at half floud you may saile through betwixt it and the land in three fathome, upon the outh side it is verie steepe, so that you can not come nearer it then 9 or 10 fathom. When the steeple of Easton is westnorthwest from you, then you are to the southwards of the banck, and when the steeple off Covehit is southwest and by west from you, then you are to the northwards of it.

Two leagues to the northwardes of Covehit lieth Leystaf, and two leagues more to the northwards of it lieth Yarmouth. The steeple of Leystaf is a high sharpe steeple, and standeth a greate musket shot within the land from the house, so that in sailing alongst you may bring the steeple on both sides of the houses. Of from Leystaf begin the banck or Holmes of Yarmouth, and lye alongst to the northwards past Yarmouth, untill thwart of Winter ton, there go divers channels through them, which men may sail through, upon divers marcks, for thesethat are there acquainted, you may saile through within these bancks, of from Leystaf untill past Winterton.

If you will run through from before Leystaf within these banks, then looke out for the fire beakon which stand by Leystaf, which at two litle white houses, the one standeth beneath upon the chindle on the sea side, and the Innermost upon a litle hommock, somewhat farther within the land. When you come from the southwards, they shew themselves to the northwards of the towne, but come at last thwart of it. In the night there is alwayes fired upon then, for to sail in there also by night. Bring these foresaid firebeakons N. W. and by N. or somewhat more northerly from you and saile in so right with them either by night or by daye, the church of Leystaf commeth then to the southwards of the towne over a Countrie house by the water side, when you come against the channell, there is at low water no more then 3 fathom depth, keep these foresaid firebeakons one in the other, or bring the Innermost rather a litle to the northwards of the outhermost, for to avoid a litle plate, which lieth on the south side of the Deep, but the channell is indifferent wyde, run untill you com against the strand in two fathom and a half or two fathome, so near as you will or can, and go then up northwardes alongst by the shoare, you shal then (being sailed a litle to the northwards) meet with a flat, whereupon remaineth at low water lesse then two fathom dept h, with laden ships, you must anchor before that flat and stay for high water, it floweth there aboute eight foot, up and downe, so soone as you are over the flat it will be 5, 6, and 7 fathom deep, edge then to the shoare, and sail toward it, and then you come before the Brewehouse, there is the roade, where you may anchor in 4, 5, or 6 fathome, from thence northward toward Yarmouth alongst the shoare is all over good anchoring and good ground.

About an English mile or somewhat more to the southwards of the towne Yarmouth, is the haven of Yarmouth, is hath two wooden heads, where you must saile in betwixt them both against the highest water, when the strongest of the floud is spent, at halfe floud it is dangerous, because of the strong tyde, which should lightly carrie you into the bight, against the shoare, (against your will) it is also best to runne in alongst by the southerhead, there it is deepest. At Yarmouth in the roade men doe commonly anchor to the northwards of the haven, right thwart of the towne, in 5, 6, 7, or 8 fathom, the nearer you anchor to the sandes the deeper water you shal have, but all good sand and soft grounds.

If you will saile into the Roade of Yaermouth through the Holmes, then bring the sharpe litle steepe, that standeth to the northwards off Yaermouth within the land, over the broad

Nickolas
channell.

broade castle, or bring the mill to the north side of the towne: keep these marks so standing, and goe in so westnorthwest, you shall find in this channell not lesse water, then eight or nine fathom at halfe flood, this channell is called S. Nickolas channell: on the north side it is deepest being come in, the roade is right before the towne in 5 and 6 fathom.

Thwart or over against the haven of Yarmouth goeth also a channell through the Holmes, for to saile in through there comming from the southwards, then bring Souton over the north side of the haven; the great tree betwixt Northon and that flat little house or Castle, saile in right with them, and keep these marck so standing, untill that you be within the Holmes, within them lieth a plate on the starboard side, a little to the northwards off the haven, called the Middle ground, you may saile about it on both sides, on the inner side in 5 fathom, but towards the Holmes, or about to the eastwards off it in 8 and 9 fathom.

From Yarmouth to Winterton, the coast lieth north and by West and Northnorthwest two leagues.

If you will sail from Yarmouth forth through vwithin the bancks to the northwards, sail along by the land, and keep the sounding off the shore in 5, 6, or 7 fathom, untill that you have the two firebeacons which stand a little to the northwards of Caster, one in the other, sail then right with them, either by day or by night, (in the night there is fired upon them) you shall so run over a flat, through betwixt two buyes, which lye each off them upon a tail off a sand, sail bouldlie in with the foresaid firebeacons, untill you come againe neare the shoare, in 5 or 6 fathom, being come by the shoare, run then againe alongst by it, and keepe the sounding thereof as before, al alongst untill you come before Winterton.

Thwart of Winterton runneth off a dangerous rif, which is dangerous to saile about by night, if men doe come to near it, which is upon the end so steep, that (in three fathom or two fathom and a half) you shall not be a ships length off from it. But when as yon, (comming from the southwards) keep your self in 6 or 7 fathom, then you can not sail so near to it. To the southwards off that riff upon the land, standeth a firetowre, which is verie good to be knowne, with a firebeakon, and also a little white house, when these come one in the other, then you are thwart of the point of the riffe.

To the northwards off this riff upon the land standeth two vwhite firebeacons, whereupon there is fired by night, for to avoid this riff. When as you come thwart off the point, then are these also one in the other, so that these doe serve for thwart marcks, and the other to the southwards of them for longst marcks, for these that will saile about it from the southwards. Comming from the northwards alongst the shoare in 5 or 6 fathom, untill you come by the firebeacons upon the north side, you must keep somewhat off from the shoare, before they come one in the other, or els you should run on against the rif. When they are one in the other then they stand southwest and by west from you, and when as the firebeakon to the southwards off Winterton commeth to be southwest, somewhat more westerly from you, then you are thwart off the point of the riff: you may not also run about far within that riff, for then you should lightly be foule off the grounds to the eastwards off it, specially when you come from the northwards for there it is not verie wide betwixt them both.

From Winterton to Haesbrough point, the course lyeth northwest 3 leagues.

Betwixt Haesbrough and the Admirals house stands a ruinous tower upon the strand. When as you keep it and the steeple of Haesbrough one in the other comming from the northwards, then you run right upon the point of the foresaid riffe. Four leagues vwithout the land lyeth Winterton sand, the south end where off lyeth about east and the north end northeast from Winterton.

Thwart of Admirals house, not far from the shoare, lieth also a little plate where no ship can goe over, but if you goe

in 10 or seven fathom, you can not saile to neare it, you may also runne through in two fathome, betwixt this plate and the land.

From Haesbrough to Cromer, the coast lieth alongst north west and by west, and W.N.W. 3 or 4 leagues;

Of the depts and shoules about these places, and in what depts men may see the land.

Five or six leagues north and by east and northnortheast from the north Forland or from Margat lieth a banck called Kentish-knop, upon it is 3 fathom water. being by it, you may even see the land from belowe.

Northeast and by N. from the N. Forland 9 or 10 leagues, and about E. from the Naze, eight leagues into the sea, lieth a banck called the Galloper, of 5, 6, and 7 fathom deep.

The wellrocks is a stonie ground, lying betwene the Court and Longsand, whereupon is no more then 2 fathom water at a half flood.

Vwithout that sand or Harwich 5 leagues from the Naze, it is 20 and 22 fathom deepe, being there you may see the land.

Thwart of Orfordnes you may see the land from below, in two and twentie fathome.

Five or six leagues without Leystafte and Yaermouth s.e. and east into sea, it is 27 and 28 fathom deep, there you may see the land.

Four leagues east and by south from land, without the Holmes off Yaermouth lieth a banck, called the Newland, which is not deepe then two fathom.

Eastnortheast at least 7 leagues from land thwart of Yarmouth it is 15 fathom, the ground red grosse land with little round stones, being there you may even see the land from below.

Thwart of Winterton and Cromer 7 or 8 leagues from the land it is 18, and 19 fathom deep, and there you may see the land.

VWinterton sand lieth 4 or 5 leagues from the land N.E. from VWinterton.

What moon maketh high water at divers places.

At the north Forland a north and south moone maketh high water.

Vwithin the Thames a south and by east moone.

before the Thames, at Harwich and Orfordnes a S.S.E. moone.

At Leystaf and Yarmouth a s.e. moone maketh high water.

Vwithout the bancks of Yarmouth, and before Cromer, a southeast moone maketh full sea.

Betwixt the bancks of Harwich and the Holmes of Yarmouth the flood falleth south, and the ebbe north.

Thwart of the bancks of VWinterton and Cromer the flood falleth s.e. and the ebbe northnorthwest.

Of the tydes and courses of the streames.

From the north Forland the flood falleth to the Rocolvers, and over the Brakes w.f.w. and by south.

Vwithout about Goodwin towards Kentish knock, the flood falleth north and by west, and northnorthwest there commeth the flood also against it from the northwards, and meet one another by the Galloper, with very great rippling and noyse, (whereof this banck is also called the Galloper) and falleth to the wellwards into the sands and channels, and also to the eastwards towards Flanders.

Betwixt the north Forland and Orfordnesse the streame falleth without the sands south and by east, and southsoutheast.

When you are to the northwards of the Galloper, then you can reckon no ebbe, then that which runneth alongst England to the northwards, the streames fall there all alongst the coasts. To the southwards of the Galloper, the ebbe goeth to the contrary, to the southwardes, and the flood to the northwards.

Courses and Distances.

From the north Forland to the north end of Goodwind the course is south and by east _____ one great league

From the north Forland to Kentishknock northeast and by east and N. N. E. 4 or 5 leagues

From thence to the Orfordnesse north _____ 12 leagues

From the north Forland to Galloper n.e. and by north _____ 9 leagues

From the Galloper to Orfordnes northwest _____ 9 or 10 leagues

From the north Forland to the Wielings, the course is east somewhat northerly about _____ 27 leagues

From the north Forland to the Mase the course is eastnortheast or somewhat more easterly about _____ 33 leagues

From the north Forland to the Tefell or Marsdirt northeast _____ 45 leagues

From the Naze or Harwich to the Mase east _____ 29 leagues

From Orfordnes to Tefell eastnortheast _____ 39 leagues

From Yarmouth to Leystaf to Walcheren or the Wicklings southeast, and south east and by south _____ 38 or 40 leagues

From the point of Cromer to Schield. to the Tefell, the course is east 40 or 42 leagues.

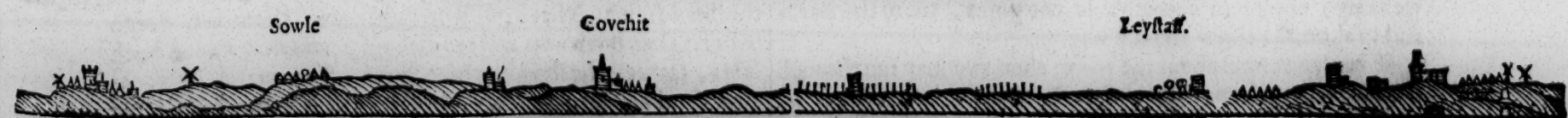
Of the heights of these lands,

The north Forland lieth in _____ 51 degrees 25 minutes
Orfordnes lieth in _____ 52 degrees 12 minutes

How these lands doe shew themselves at Sea.

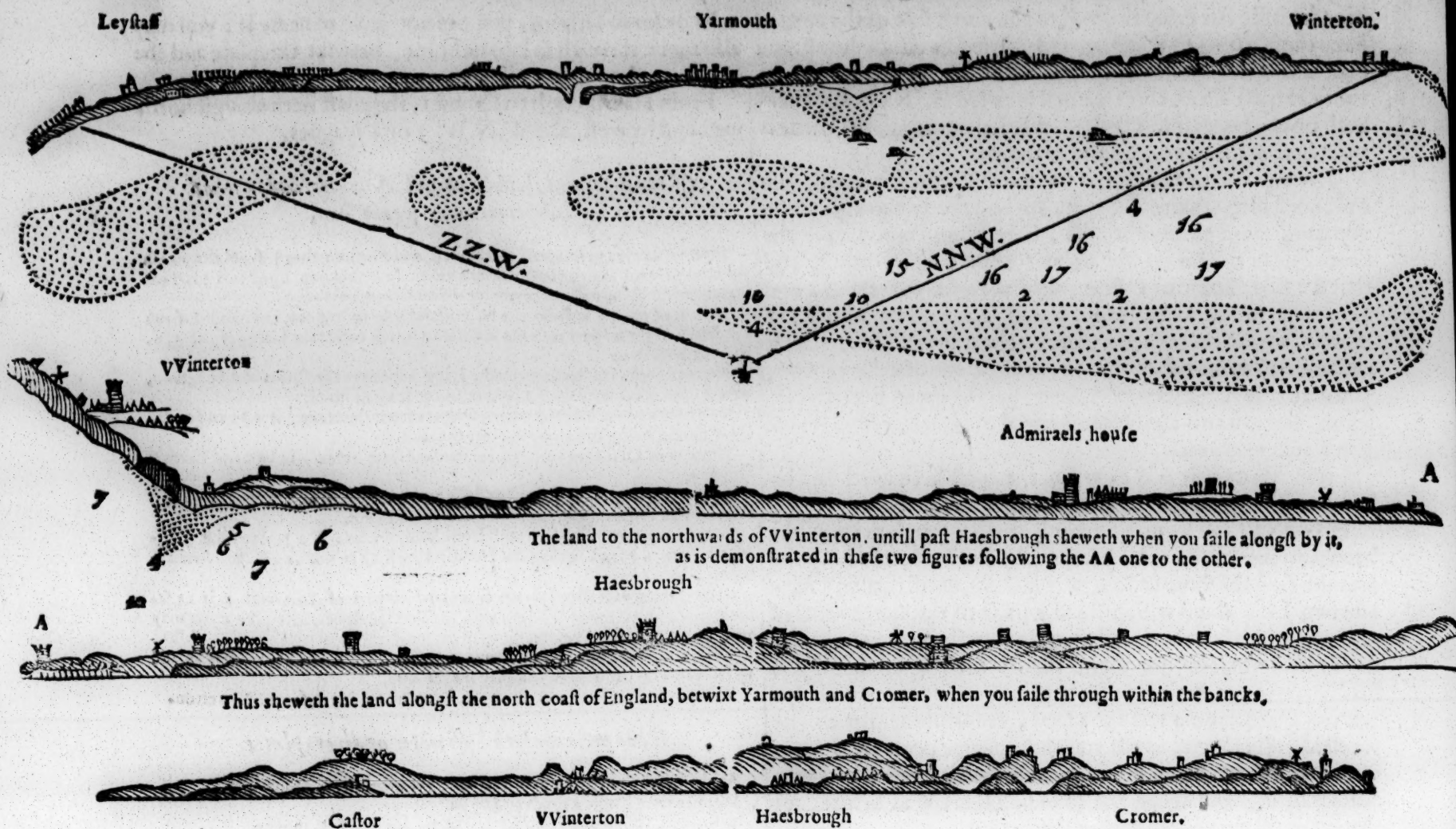


Thus sheweth the coast of England betwixt Orfordnes or Sowle haven,



Thus sheweth the land betwixt Sowle land Leystaf.

Leystaf



The tenth demonstration,

In which, the coast off England are set forth betweene Cromer and Orkeney.

Blakeney. He land lieth from Cromer to Bornum first W. N. W. and West and by north, and then west, and W. & by S. 9 or 10 leagues. From Cromer to Blakeney it is 3 or 4 l. At Blakeney standeth a high steeple, which you may see alongst farre over the land, when it commeth to the litle steeple, then you have the first buy of the channell, which lieth at the S. end of the Pole, which is a sand at the west side of the channell of Blakeney, go from the first buy to the other and alongst by them, untill you come within the Haven, this is a tyde-haven, where men doe lye dry at low water 4 leagues to the Westwards of Blackeney lieth Wels, betwixt them both lieth the foresaid should, called the Poll and Pyper, there it is should for of at sea. At the West end of this should, goeth in the Deep or Wels, the beakons that you must saile in alongst by, stand al alongst by the Pyper, When Hoebrom standeth east from you, then you are to the westwards of the Pyper, thwart of it is good road in 6 fathom. Wels lieth then southeast from you, and the trees stand then also against the steeple, then you may saile open in to the Haven of Wels, alongst by the foresaid beakons. Betwixt Wels and Bornum lieth a back, you may ride under it in 5 or 6 fathom, at halfe flood there is upon it no more then 2 fathom water.

Bornum. He that will saile into Bornum, must goe in at high Water, and he must bring the steeple against the Black-house, and sail so in by the beakons, leaving them on the larboard side. These are all ryde-haven.

Chappel. From Bornum to Chappel, the course is Westsouthwest, 2 leagues, to the northwards of it lieth the Sonck, which is a sand that falleth dry at low Water. You may saile about it on the Sonck both sides the Sonck unto Lin.

Easter-channel of Lin. For to saile in to the easter channell of Lin, then saile about to the eastwards of the Sonck, and bring that wood of trees, over the point of Sitsein or Suytson, and Chappell east from you, then goe in S. E. and by S. and you shall find the first buy, then in S. and by W. and S. S. W. and by little and little more westerly; untill you come about the point, there the buyes and beakons shall shew you the way.

When you come about the point, then you may run through the sands, in to the norther channell, and saile out againe by the same in to sea, by the buyes and markes that are there of.

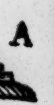
This norther Channell lieth in to sea northeast and northeast and by east, and is very well buyed and beakoned.

You may also saile in to the westwards of the Stonck, to west, south and by east in alongst by it and runne so to the first buye, and then from the buye alongst by the beakons unto Lin before the towne. When you come from the eastwards, you may well run through withio the Sonck, alongst by the land, close alongst by Chappell, and in south and by West unto the foresaid first buye.

For to saile from Cromer or Blackeney to Boston deepe, you must goe on west and by north, untill you come by the land betwixt the Hommer, and Lagerneffe. From the Soncke lieth a long banck, called the Flats, north into sea a league, which at low water falleth dry at divers places. You runne with the foresaid west and by north course, (when you are by Cromer or Blakeney a litle without the land) alongst without, or to the Northwards of this banck, at high Water, you may well goe over it, the ground on the east side goeth up flat and plaine, run boldly to it without feare, untill you come in foure or three fathom, hee that useth his lead can take no hurt of it, but on the inner side, that is, on the West side it is very steepe, so soone as you be over the shouldest, you shal get suddenly deep water, and good sand ground, under it or within it, it is good riding for easterly winds.

For to saile in to Boston deepe, through within the Knock or Elle-knock, you must keepe the sounding of the shoare in foure or five fathom, so long untill that the point of Lagerneffe be westnorthwest from you. Betwixt the shoare and Elle-knock remaineth at low water, five fathom in the middest off the Channell, but Elleknock falleth dry at low Water. When that Lagerneffe is westnorthwest from you, then goe on south east, through betwixt Elleknock and the should, (which shotteth off from the shoare to the westwards of Lagerneffe) untill that you get againe depth of six or seven fathom, in this going over remaineth at low water, no more then two fathom, but it floweth there about three fathom up and downe. Being over it, then goe on southwest alongst betwixt Longsand and the should, which lieth off from the shoare, there it is deepe betwixt then both nine and ten fathom, you may sound both sides, (as well the shoulde which lyeth off from the land, as Longsand) in five fathom, but the flat is somewhat steeper then Longsand.

For

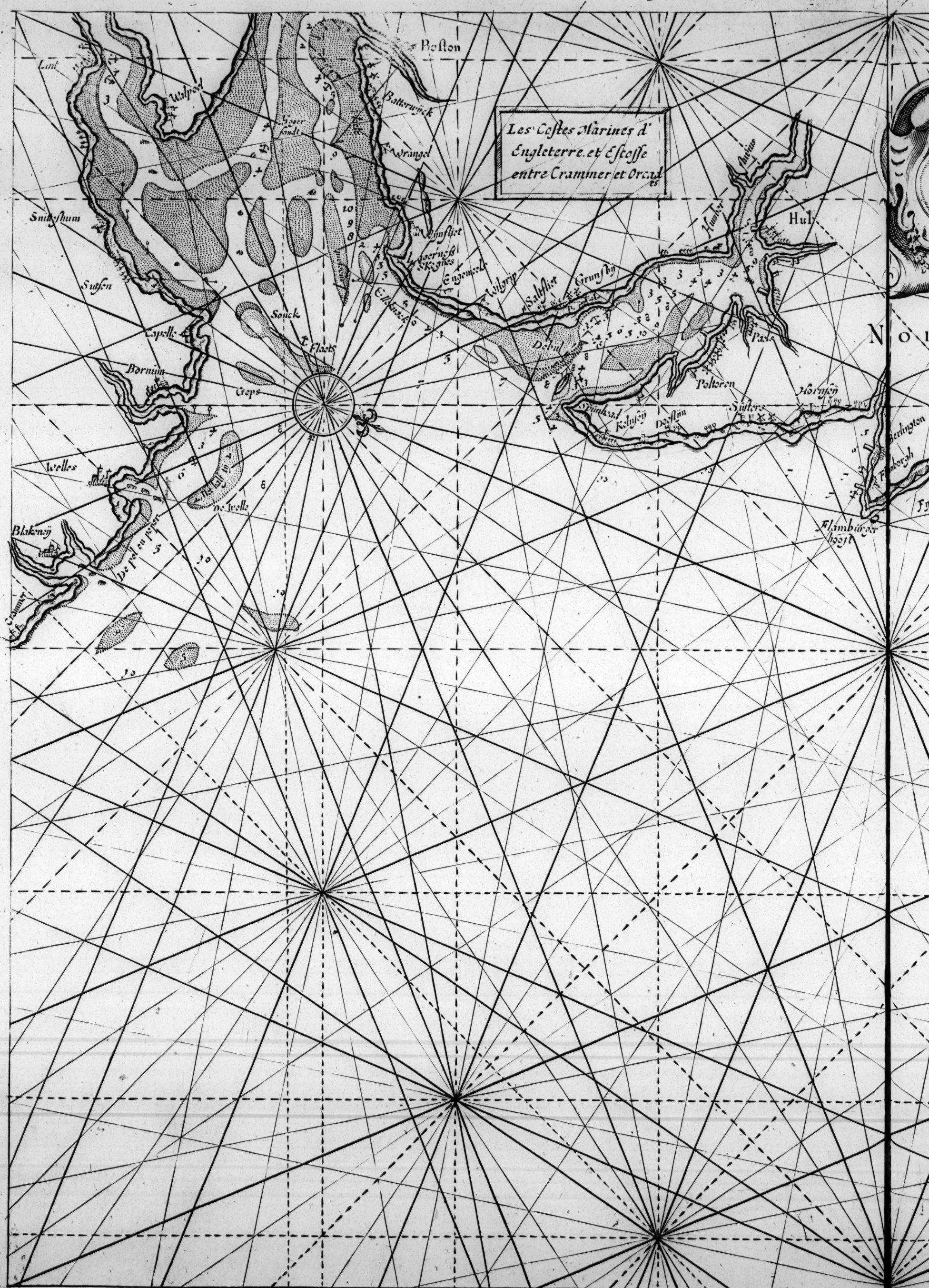


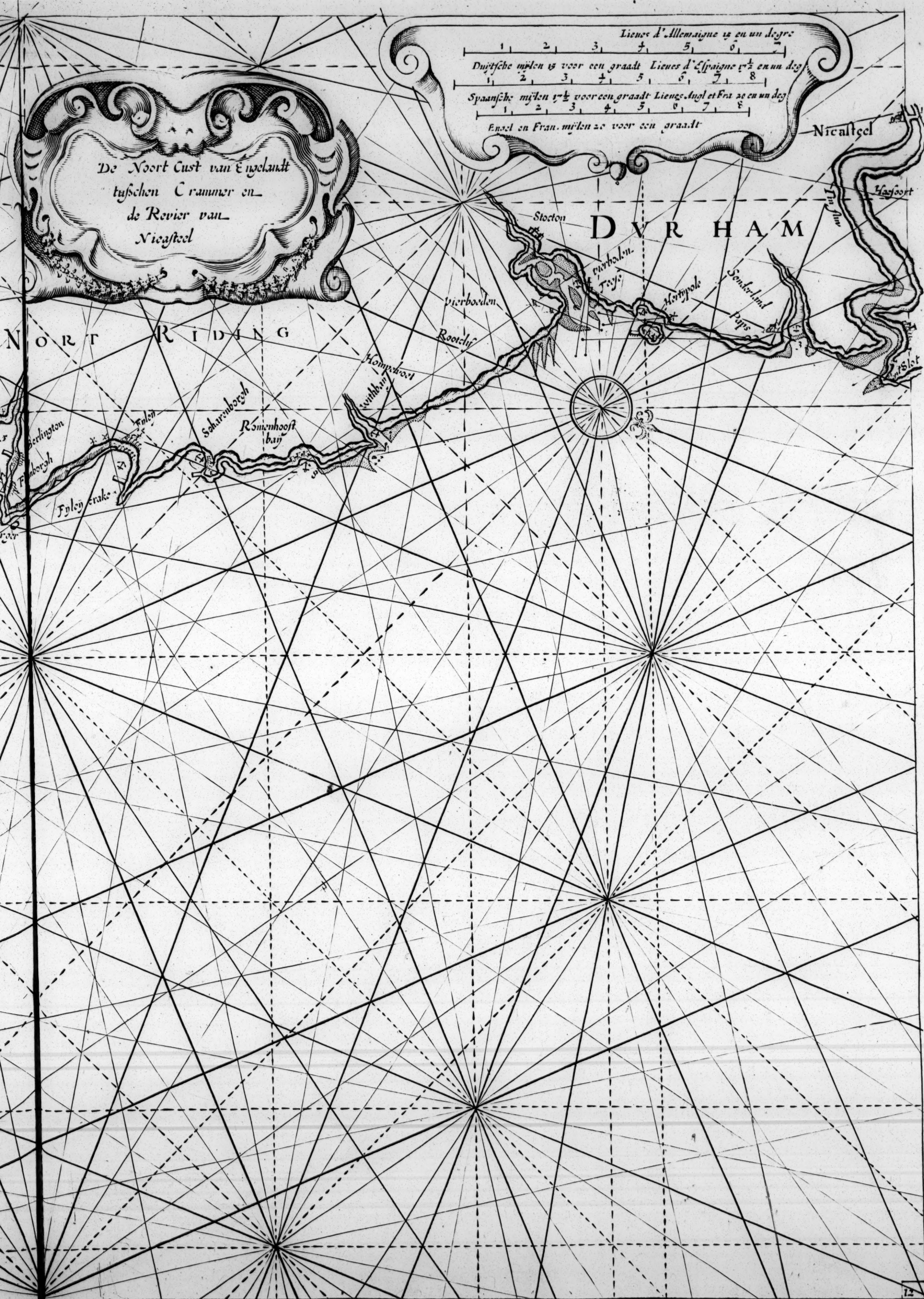
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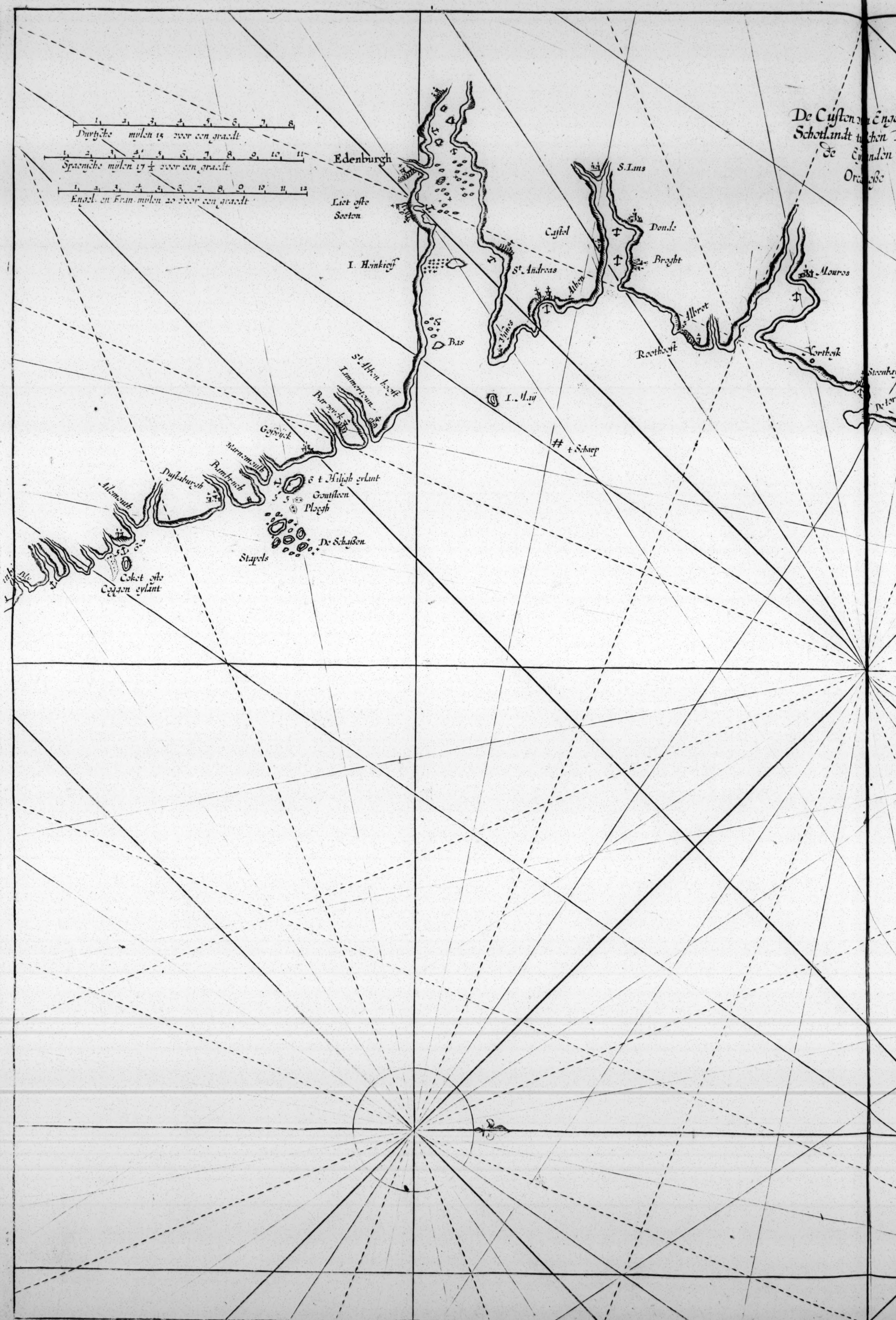
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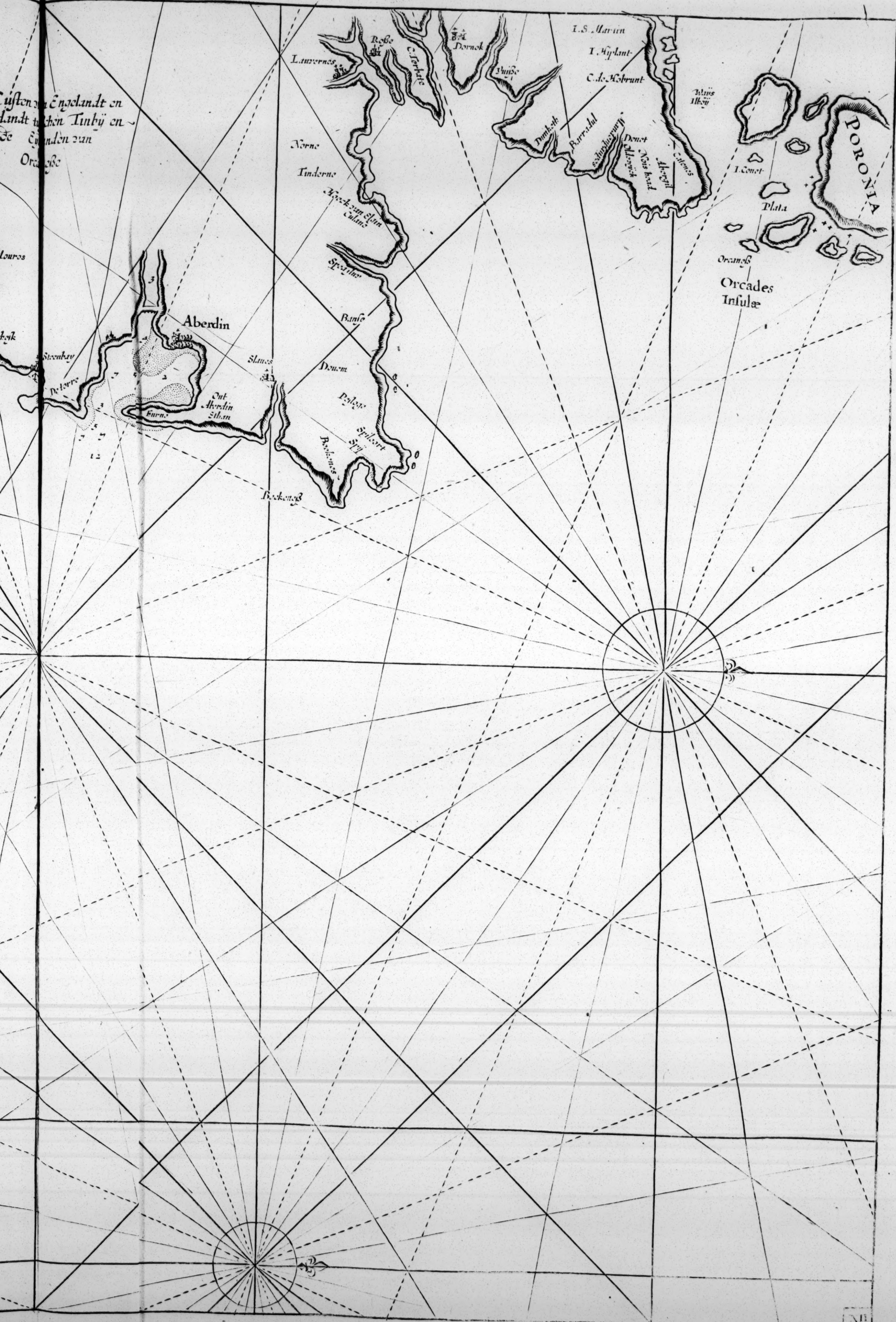
o fail
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deep,
noek

land.







Link

Ingold-
mills

Dogshead

Butter-
wyke.

Plate by
Saltfleet
haven.

For to fail
into the
Hommer.

For to faile without Ellecknock into Bostons deepe', com-
ming (as is before said) to the west land, you must loocke out
for the two steeples of Ingoldmills, standing somewhat to the
Northwards off Lagerneffe, bring them one in the other, and
then you shall stand about Northnorthwest from you, keepe
them one in the other, and goe on southsoutheast, until that the
trees upon the point by west Lagerneffe, come without the
point of Lagerneffe, and then you runne through betwixt Elle-
knock and Dogshead, (that is a shold without Elle-knock)
when the afore said trees come a handspikes length past, or to
the eastwards of the point of Lagerneffe, then goe on South-
west, and then you runne right into the deepe, betwixt Elle-
knock and Longsand, and so you shall finde betwixt Elleknock,
and the point of Longsand five fathom depth, being past Elle-
knock, it will be 8, 9, and ten fathom deep.

If you will faile out of the sea into Boston deepe, and not a-
longst by the land, as is before said, then bring the foresaid trees
a handspikes length without the point of Lagerneffe, which
shall then stand from you about W. S. W. faile in so right with
them, until that the high land within Lagerneffe or Winfleet
begin to come even without the point of Lagerneffe, which
shall then be from you somewhat more northerly then West,
then you are within the point of Longsand. Or else there stand
3 little houses on the seaside, about halfe wayes betwixt Lager-
neffe, and Ingoldmills, when they come to be N. W. from you,
and those foresaid trees without the point, then you are also
within the point of Longsand, goe in then S. W. betwixt Elle-
knock and Longsand, as before said. A little past Lagerneffe lieth
a should or plate about the middest in the fareway, but nearest
Longsand when the trees upon the point to the southwards of
Winfleet come in the second valley of the high land within
Winfleet, then you are right thwart of this should, edge there-
fore to one side or other, rather towards the should, there is wi-
delt, keepe boldly the founding of the should, and runne south
west alongst by it, untill that the steeple of Boston come over
the steeple of Butterwyke, that is also a flat steeple, (but smal-
ler then that of Boston) standing in a wood of trees, thwart off
it runneth the should somewhat of with a point, being past it,
goe on westsouthwest all alongst by the foresaid should, untill
that the great steeple of Boston come over the second mil, the-
re it is good anchoring by the W. shoare in 5 fathom at low wa-
ter. He that commeth there at low water, must anchor and stay
for the tyde untill halfe flood, before that you may not sail fur-
ther in from thence, and then you shall not also find more then 2
fathom upon the should.

From thence the deep lieth in alongst by the beacons about
south to third beakon, being past that westsouthwest, and then
by little and little, more westerly and northerly, but run all a-
longst by the beacons, leaving them on the starboard side, at
last on north into the River.

Upon the point of the river standeth a house, which is a
sheephouse, before that you come by it, it seemeth as if there
were no opening, by reason that is al even green land, run in by
it, all alongst by the land, being past it, the river doth open it
self. Being come within the points you must run in betwixt two
dikes, a league up until you come before the towne, in the river
it is a half flood everie where deep enough. When as that you
come a little within the houses of the towne on the larboard si-
de, there you must let fall your ankor, and stay untill that the wa-
ter begin to fall, then you shall have flood enough for to drive to
the Kay, there you make fast with one cable, it doth not begin
to ebbe there, before that water be fallen 3 foot.

An east and west moone maketh in Boston deepe the highest
water, but before the towne an E. and by S. and eastsoutheast
moone. He that commeth from Boston, and wil faile out at the
deep with a high water, let him loock out for the foresaid high
land within Lagerneffe, when that cometh behinde the point off
Lagerneffe, then the may boldly set his course wether he desireth
to be, either to the eastwards, northeastwards or northwards,
there is no then thing that can hurt him.

From Lagerneffe to the Hommer it is about 7 leagues, most
north, betwixt them both, about a league to the southwards of
the Hommer lieth a place called Saltfleet haven, a little to the
northwards of a sharpe steeple called Wilgrip. Thwart of that
foresaid Saltfleet haven, about an English mile from the shoare
lieth a bancke or Sandplate, not verie great, which at low water
falleth almost drye, you must runne about without it, and leave
lying towards the land from you, but yet for need you may al-
so sail through within it.

For to faile into the Hommer comming from the North-
wards, you must faile alongst by the shoare, and runne about
by the north point, but comming by the pointe you must keepe
somewhat of from the shoare in foure or five fathom, for to

avoide a little taile, which lieth of from the point, being about
it, runne to the litle lland, which lieth a little by west that fo-
re said north point.

If comming from the southwards you desire to faile to the
Hommer, then bring the Pawle steeple (which is a high sharp
steeple standing the north side of the Hommer) a little by
south the North point off the Hommer, or over that foresaid
litle lland, and faile so right in with it, untill that you come
by that litle lland, being come by it, leave it on the starboard
side and run in close by it, for to avoid a great Sand called the
Bull, which lieth off from the South shoare almost unto that
litle lland. When that you come within that litle lland, then
bring the two beacons (which stand upon that litle lland) one
in the other, keepe them so standing, and faile so on the west-
wards towards Grimsby, you leave the buye upon the Bull
lying then on the larboard side, and run along to the North-
wards off it: In this faireway it is seven and eight fathom deep.
You may not come neerer the Bull then in fixe fathom. Before
Grimsby you may anchor in three or foure fathom at low wa-
ter, it floweth there at least three fathome upon and down, a
westsouthwest and eastnortheast Moone maketh before the
Hommer the highest water. Within the foresaid lland at the
North point off the Hommer, you may anchor in three or
foure fathom: There lye commonly Ships that are bound out,
and tarrie for the wind.

From Grimsby in alongst to Hull, the course is westnorth-
west to the end of the bancke or Ballast plate, which you must
leave lying on the North side. On the South side lieth also a
litle plate, there standeth commonly a Beakon upon it, that
you must leave on the larboard side, and run along to the north-
wards of it, being past it, you may run alongst by the south
shoare in three fathom. The faireway there is foure, five, and
sixe, and thwart of the foresaid Beakon eight and tenne fathom.
When you come to the end of the Bancke, you must edge up
to the Westwards about by the point on the South side, but
there runneth of a Flat which you must avoid. Being a little
about that point you shall see the Towne off Hull, lye before
you, there you may anchor before it in fixe, seven, or eight fa-
thom: An east and west Moone maketh full sea before Hull. He
that will anchor upon the ballast plate, let them bring the Flat-
steeple which standeth a little to the northwards or the east-
wards off Hull to the high point of Pael, and keepe them so
standing untill that he come the plate, there it is best for to an-
chor upon it.

From the north point of the Hommer called Spurne head, <sup>Flam-
brough
head.</sup> the course is north and by west eight or
nine leagues, betwixt them it is shold water of six, seven, and
eight fathom deepe. Flambrough head hath many white spots
and Chalke hills, especially upon the north side towards Fyley.
Flambrough hath a Head or Piere. A leagues to the westwards
of it on the south side lieth a litle Towne called Burlington, <sup>Burling-
ton.</sup> which hath also a Piere. You may anchor there in the Baye in
5, or 7 fathom.

Three leagues by west Flambrough head lieth Fyley, in a ^{Fyley.}
rounde bay to the southwards of a point that lieth out, which
hath a Pier or Head, where you may lye within it, but if falleth
the drie at low water,

Without the head of Fyley lieth a rock under water, called <sup>Fyley
bridge.</sup>
Fyley bridge, betwixt it and the Pier you may well lie a Flote
with a ship off an hundred lasts, in 5 fathome at low water, and
have shelter for a northeast and east winde.

From the point of Fyley to Scharbrough it is northwest two <sup>Schar-
brough.</sup>
leagues Scharbrough hath two Pieres or Heads, where you may
runne within them at high water from the southwards, but at
low water it falleth there also drie. Men com in there from the
the southwards.

From Scharbrough the coaste lieth alongst by Robbinhoods <sup>Robbin-
hoods bay,
Whidbye.</sup>
bay, untill before Whidbye, most northwest, but past Whidbye
the land falleth in westnorthwest, and by little and little more
westerly unto the Tees.

Robbinshoods bay is a good roade for a southsouthwest and
west winde, men lie in 7 or 8 fathome.
Whidby is a tyde-haven, which falleth drie at low water, at the
east side of the haven runneth of a riffe of rocks, where of you
must take heede. For to faile in there, you must runne in be-
twixt the two beacons, untill that you come in betwixt the two
lands, and anchor there.

From Whidbye to the Teese the Coast lieth most West- <sup>Hundley-
foot.</sup>
northwest, and west and by north, about seven leagues, betwixt
both lye Huntley foot and Reddecliffe. Huntley foote is a high
hill, lying on the sea side, about four leagues to the eastwards
of the Tees. Reddecliffe about halfe wayes betwixt Hunt-
leyfoote and the Tees, it is a cliffe of such verie redde earth,

that when the sunne doth shine against it, it is to see to like redde cloth: these two are very good markes, for to knowne this coast by.

Close to the southwards of the mouth of the Teese lie three Riffes, which lye about a halfe league eastnortheast into sea, which are verie foule and stonie, and fall drie at low water, upon the north side they are verie flat, so that you may founde aboute by them, in 5, 6, and 7 fathome, but on the south side are so steepe, that comming neare them, and sounding in 13 and 14 fathom, you should be upon them, before you should beable to heave the lead the second time.

A league and a halfe to the northwards of the Teese lieth Hartlepole, upon a pointe that lieth out almost like an Iland. For to goe in there you must runne into a bight to the southwards of the Towne with in a head, untill you come against the Towne, there you shall lye drie at low water.

About halfe wayes betwixt Hartlepoole and the Teese, runneth off also a riffe of rocks thwart from the shore a good waies into sea, come no nearer it, then 5 or 6 fathom. There standeth a mill to the northwards of the towne Hartlepoole, if you keepe that to the west side of the towne Hartlepole, then you can not faile upon that foresaid riff, but if you bring the foresaid mill a little to the westwards from the Town, so that you may plainly see through betwixt the mil and the Towne, then you shall not faile to saile upon that riffe.

For to saile into the Teese comming from the northwards, you must observe these markes following. A good wayes to the northwards of Hartlepole, a little to the southwards of Sonderland, and a litle within the land lye upon the high land, two hommocks close one to the other very good to beknown, off fashion like wornens breasts, called the Paps, keepe these two hommocks even without the point of Hartlepole, which shall then stand from you north west and by north, and saile so on to the southwards, and you shall fall before the Tees, and shall not faile to neare the sands that lie out before the mouth of the Tees, and lie of aboute a halfe league into sea.

On both sides, as well on the north side, as the south side of the Tees stand two litle white houses for firebeacons: If you come from the northwards and get sight off them, then bring first the two southermost one in the other, which shall then stand from you south and by east, saile right in with them, untill that the other two, which stande on the north side of the Teese, come also one in the other, then leave them on the south side, & saile in right with them that stand on the north side, & so you shall run in amidst the channell, there is upon the barre, or shouldest, at low water no more then 5 foote, but it floweth there with a common tyde, at least 2 fathom up and downe, A S. W. moone maketh there full sea. If when you come from the southwards, you will saile into the Teese, then bring the Innermost of the two firebeacons (which stande on the north side) at least a handspikes length, or the length of a capstone barre, to the N. wards of the other, and runne so westwards towards them, untill that the two firebeacons on the south side are one in the other, then saile in right with them, as hath beene saide, untill that the two firebeacons on the north side come one in the other: when you have them one in the other, runne in right with them, untill that you come by the north shore, and then close alongst by it.

When as that you come so farre in past the first fire beakon, to wete, that you may see Hartlepole betwixt the two firebeacons, there you may ankor in three, four or five fathome, or when Hartlepole commeth betwixt the foresaid firebeacons, then go southsouthwest, untill that you come by the south shore there it is also good ankorng. Further it is pilots water unto Stockton, for there within, the deepes doe shifte oftentimes, and that in shorte time, 3, 4, or 5 times in a summer.

He that will saile in there with northerly windes, and a flood, must reckon well his tydes, for the flood falleth strong to the southwards over the grounds, and should there by bee lightlie carried behinde the banck to the southwards of the buye which lieth upon the pointe of the banck.

Besides this foresaide channell there runneth yet another channell through the grounds, which lye of from the Northpoint of the Tees. For to saile in there, you must take marke of the two high lands within the land, to the southwards off the Tees, bring them within a handspikes length one to the other, or bring the Paps to the west side of Hartlepoole, then shall also the two high lands come within a handspikes length neare one to the other, saile in right with them, and so you shall runne right into that new channell, alongst through that foresaide sand, and come against the buye (upon the sandes on the south side of the Deepe) againe in the right forewaye. When that you get again deeper water, or have the two fire beacons

on the north side one in the other, then goe in towards them, and further as hath been before said.

About 7 leagues to the northwards of the Tees lieth the river of Sonderland, a little to the northwards of the Paps, which are very good markes for to know the land by there abouts. When the Paps are S. S. W. from you, and that you are about an English mile from the land, then you are right before the river of Sonderland, the ground is there abouts indifferent cleane, but somewhat stonie, you may ankor there in 4, or 5, and 6 fathom. On both sides, as well on the north pointe, as the south pointe of the River it is stonie. On the north pointe standeth a beakon in the water, there you must runne in, within a litle shippes length alongst by it, being past that you shall gette deeper water, to wite, a fathom and a halfe, and two fathom at low water, but upon the barre remaineth no more then three foote. With a but common spring, and high water there is about 2 fathom and a half, or a little more.

After this foresaid first depth of a fathom, and a halfe or two fathom, you shall meete againe with a stonie floore, about three shippes lengths broad, upon it is at high water about eleven or 12 foote deep, according as the tydes shall runne: being over there, it is again deeper. A little past that is a narrow place, where a long shippe shall scarce be able to wend, within it, it is wide enough, and very where good ankorground.

From the Tees to Tinmouth the course is N. N. W. 8 or 9 leagues. Two leagues to the southwards of Tinmouth lyeth the pointe of Sonderland, but close to the southwards of Tinmouth goeth in the river of Newcastle. From the point off Tinmouth shooreth of a ledge of rocks, you must saile in by it on the starboard side. The markes for to saile into this River are two firetowers or firebeacons, which stand upon the north shoare, bring them one in the other, or the innermost (that is the highest) a little to the northwardes of the outermost or lowest, and saile so right in, alongst by the foresaid ledge off rocks on the N. side, and so you shall have upon the shouldest 2 fathom at halfe flood, a S. W. Moone maketh there full Sea. The south shoare is flatte you may lead it in there with the sounding pole, for ships, that goe not deepe, in ten foote at halfe floude. When you come within, runne all alongst by the north shoare, untill past the little towne Sheels, edge then over to the other shoare, untill you come through the crooked reach, there the river lyeth up againe a little to the northwardes, and then to the southwards to Hawkes-bill, and about by it to the towne Newcastle.

Seven or eight leagues to the northwards of Tinmouth lieth the Cocke Iland, betwixt them both about halfe wayes lieth a River called Bly, where the French men doe much saile to fetch coale. From the N. point of this river runneth of a ledge of rocks a great shot of a cast peece, about southeast into the sea, but the south side, and the coast to the southwards of it, is very cleane and sand-strand. Upon the south point stand two beacons: If you will saile in there, bring them one in the other, and saile in right with them, and then you can take no hurt off the foresaid ledge or riffe of the northpoint. When that you come by or thwart of the outermost of the two foresaid beacons, you shall see there by it another smaller beakon, that standeth upon a litle ledge of Rocks, that shoteth of from the south point, leave that on the larboard side, and runne in alongst close about northwards of it. The foresaid ledge of Rocks on the north side remaineth at high water, (a good wayes from the land, and also at a spring-tyde) above water, within it is a bight, there it is good lying for a north or northeast winde, and there remaineth at low water two fathom depth. In the mouth of the River it is with an ordinary tide and high water about two fathom deep, or somewhat more, and it floweth there two fathom up and Downe, so that at low water it falleth almost altogether dry.

The Cocker Iland, is a very litle Iland, and not high it lyeth about a halfe league from the land, you may come to ankor in it for an east, and southeast winde, but the winde comming to the northwards of the east, maketh there a bad roade, for you must lye betwixt the Iland and the maine land where you have no shelter for a north winde. On the southside of the Iland the ground is foul, and a little to the southwards of the Iland, runneth off a foule ledge of rocks from the shoare, untill thwart or past the Iland. He that commeth from the southwards, must keepe the Caste of Bambrough without the Iland, or els he should not faile to saile upon the point of that foresaid ledge.

Betwixt that ledge and the Iland it is also very narrow, so that a man standing at low water marcke upon the rockes off this ledge, should almost be able to cast with a stone unto the Iland. For to saile in there, take heed unto these marcks hereafter

Sonderland

Bly

Cocker Iland

after described: there standeth a house upon the sea side, which is a salt kettel, and also a castle somewhat further in within the land, which doth shewe it self high enough, bring them one in the other, and then they shal stand somewhat more northerly then west from you, and runne so right in with them, and so you shall runne in right amidst the channell betwixt both, being come within, edge up behinde the lland, and anchor there in 5 or 6 fathom.

About this lland there run also manie more divers little Rivers, into the land, but they sal most drie at low water.

Staples. From the Cocket lland to the Staples, the course is north-northwest eight or nine leagues. The Staples, that are high llands and rocks right to the eastwards of Bambrough, lying at least three leagues from the land northeast into sea, a little to the northwards of them lieth the Holie lland. To the southwards or the westwards of the Holie lland is a baye, where you may lye landlockt almost for all windes, against the Castle is the best road: you may also runne in there from the southwards, through betwixt the Staples and the maine land.

Holy lland Betwixt the Staples and the Holy lland lye two suncken Rocks, which at low water come verie neere even with the water, the westermost towards the Holy lland, is called the Goldstone, the eastermost by the staples, is called the Plough. For to avoid them when you will saile through betwixt the staples and the Holy lland, wheter you come from the southwards or the northwards, then bring the steeple of Teustenbrough over the Castle of Bambrough, and keepe them so standing, and then you shall run through betwixt them both, this channell lieth so through northeast and southwest. From the outermost end of the staples to S. Abbens head, the course is northwest 7 or 8 leagues.

From Holy lland to S. Abbens head it is northnorthwest 7 or 8 leagues.

S. Abbens head. To the northwards off S. Abbens-head men doe runne in unto Liet to Edenbrough in Scotland.

The Bos S. Abbens head and the lland the Bas lye east and west four leagues asunder. The lland May and S. Abbens head North-west and south-east foure great leagues. May and Bas lye one from the other southwest and by west and northeast and by E. three leagues and a halfe. The Bas is a high round Rocke cleane round about, which you may saile alongft by on both sides. Betwixt the rocke and the south shoare it is ten and 12 fathom deepe, but the common fareway is alongft to the northwards of it. Betweene S. Abbens head and the Bas it is most part a clean Coast, but without anchor ground. The lland May is greater then the Bas, and also cleane round about, except on the east side. there it is foule.

lnd May From S. Abbens head alongft to the northwest of the Bas, the course is west and by north and westnorthwest foure leagues, and from by north the Bas to the lland Inchkieth West and West and by north about five leagues. Betweene the Bas and Inchkieth by the south shoare lye many rockes, litle llands and foule grounds, where at divers places is road, but are not to be used, but by them which are there very well acquainted. Inchkieth and the lland May lie southwest and by West, and northeast and by east seven great leagues asunder. Inchkieth is somewhat a long small lland, a league to the northwards off it lieth an out point on the north Coast, called Kingorneffe, before it and about it lye some litle Rocks under Water, but a litle to the eastwards off the point is good anchor ground and road for Westerly Winds. Betweene that point and the lland May, or the point of Fifsnes on the north shoare lye divers litle havens, where of some of them doe also yeeld out coales, but are litle or notting used by the Hollanders. On both sides off Inchkieth is good ground, and good lying as wel for Westerly as for Easterly Winds.

Liet. From Inchkieth to Liet it is southeast a league. Before Liet about halfe an English mile from the shoare lieth a Rocke upon which standeth a mast (with a crosse or some other thing of wood upon the top of it) for a beakon. At high water the sea floweth over it, and low Water it falleth dry. With a spring tyde at low Water men may goe on foot to it. From the east side of that Rocke lieth of a riffe almost unto Inchkieth. Yoy may also run through to the southwards of Inchkieth betwixt that foresaid riffe and the south shoare, but it is not to bedone, but by them which are there exceding well acquainted: There is altogether full of Rockes and foule ground. When as you saile into the northwards of Inchkieth you must leave the foresaid Mast on the larboard side, and run about to the northwards off it, and then towards the south shoare, and anchor about halfe an English mile by West Liet, and also halfe an English mile from the shoare, in fixe, seven or eight fathom. Liet the haven Edenbrough, at tyde haven which falleth dry at low Water.

From Liet to Queenes Ferrie there lye on both sides many rockes, some above and some under water. In the narrow before Queenes Ferrie lieth a litle lland called Inchgarve which you must runne alongft to the northwards of, on the south side it is with a stone bancke (where men may goe over at low Water) fast to the maine land, alongft to the northwards of it, it is cleane and deepe. Within that litle lland lye Caryn and other places more where men doe lade Coales.

Under the east side of the point to the northwards of Queenes Ferrie is good road in 2, 3, or 4 fathom, according as you lye farre from the shoare.

A league north from the lland May lieth the point of Fifsnes, lying from S. Abbens head northwest and by north 5 great leagues. From thence to Dondee it is northnorthwest five leagues. Dondee is a good haven which goeth in betwixt 2 high Lands, being within men doe anchor before the Towne. Farther in upon the River lieth another Towne called S. Johns, S. Johns, which you may goe up to at high Water.

Betweene the point of Fifsnes and Dondee lieth also the baye of S. Andrewes, there is all over good anchor ground. Four great leagues N. and by E. from the point of Fifsnes, and N.E. from S. Andrewes lieth a great rocke called the Inchkap, which the Sea floweth over at high Water, and at low water it falleth so dry, that the Fishermen goe upon it.

Seven leagues to the northwards off Dondee lieth Monroffe, a good haven. First you must saile in there amidst the channell, and then edge up to the northwards and anchor before the Towne.

Betwixt Dondee and Monroffe lieth an out point called Redhead, about a great league to the southwards of Monroffe. There standeth a high tower upon the land called Albrot.

From Monroffe to Stone Baye or De Torre, the course is n. Stone Baye e. and by N. 4 leagues. This is a deepe bay and a good Haven for these that are bound to the southwards, where men may lie landlockt with many Ships.

Three leagues to the N. wards of it lieth Aberdyn: In this Aberdyn, Havens mouth it is three fathom deep. The westpoint is somewhat foule, therefore you must run in by the eastland, until you come within the haven, and anchor before the Towne in 4 or 5 fathom. Up to the N. wards is a great Bay, but is should on both sides. There goeth through a litle Creeke towards old Aberdyn, which is an old ruinous towne.

From Aberdyn to Boekenes the course is northnortheast Boekenes, twelve or thirteen leagues. Betwixt them both lieth a tyde-haven. Boekenes is a high Hil land lieth upon the south side of the point. To the northwards of Boekenes lyeth a Bay as a Haven called Spy or Spilaert. From thence the land lieth in West and Westsouthwest unto the Haven of Rosse or Luvernes.

To the Northwards of Rosse lieth an out point called Cape Terbate, right in the buttome of the Baye betwixt Catnes and Boockenes, distant from Boockenes about 19 or 20 leagues. In this baye manie havens and sounds, which are deep enough for to come into with great ships. It is from thence to Catnes 26 leagues N.E. and by N. Catnes lyeth from Boekenes N. W. and N.W. and by N. 21 for 22, 20 leagues. From Boekenes unto the outermost Orkanes it is N. and N. and by W. 32 or 33 leagues.

The Orkeneyes are one and thirtie llands in number, first Wayers or Elhoy, which lieth next to Scotland, five leagues about the point. About N.N. E. of from the point of Catnes lye two litle lland Pits and Pichlantscare there you may run through to the westwards betwixt Ilhoey and Scotland.

To the northwards off them lyeth an lland called Heynda, with an other lland called Platto, to the northwards off Platto lieth Mayland or Ponomo. On the northside of this greates lland are all the havens where the ships come to.

Upon the eastside of this great lland lieth an other lland called Kabunsa, to the northwards of it lyeth an other lland at the northeast point of the greates lland, you may also runne through there towards Papewester, and leave Sanda lye on the starboard side.

Clofe to Papewester lieth Fara, to the southwards of it is Sirza. To the eastwards of Sirza and Fara lye two llands, in the middest of all these llands, called Eeda and Chapnoza.

Sanda lieth to the northwards of all these llands, but Papa and Stronza lye to the southwards of Sanda.

To the eastwards of Stronza lyeth an lland called Cuistella, that is the eastermost lland off all, the northermost is called Ronaize or northernanse.

Eleven or twelve leagues northwest from the great lland lie two rockes, the one under water and the other above water, he that commeth from the westwards, must take heede of them.

*Of the Depts and shoulde about these places, and in what
Depts men may see the land.*

Thwart of Winterton and Cromer, seven or eight leagues from land, it is 18 and nineteene fathom deepe, and there you may see the land. Northeast and northeast and by north from Cromer lyeth a bancke, whereupon remaineth at halfe foud no more water, then 4 fathom, from thence you may see the land indifferent well.

North and by east from Blackeney lyeth a bancke, whereupon remaineth at halfe foud no more water then five fathom. In eightene fathom thereabouts you may see the land. From thence to the point of Chappell it all should.

About northnorthwest and north and by west from VVinterton-sand lieth the bancke before Cromer 5 leagues without the coast.

To the northwardes of the Hommer off Hull, you may see the land in 25 fathom.

Flambrough-head men may see in five and thirtie fathome.

Scharbrough men may see from below in 45 fathom.

*Of the tydes and courses of the streames, about these
foresayd places.*

Before Cromer a southeast moone maketh high water

At Blakeney, VVels, Bornum and Lyn, an east and west moone.

Before the Hommer, of Hull an eastnortheast and w.f.w. moone.

From Blackeney to Flambrough-head, the floude falleth southeast and the ebbe northwest.

At Flambrough and Fyley, in the Peer a westsouthwest moone maketh full Sea.

At Scharbrough and Robbinhoods-baye a southwest and N.E. moone.

In the Tees and at Hartlepoole also a southwest and northeast moone.

Before the River of Newcastle a southwest and northeast moone maketh also the highest water.

Thwart of Flambrough-head, Scharbrough, the Teefe, and also thwart of the river of Newcastle, the floud falleth southeast, and the ebbe northwest.

To the northwardes of the Tees, the floude falleth southsoutheast alongst the land, and from the Tees to Scharbrough southeast and by east.

On the coast betwixt Tinnmouth and S. Abbenshead a southwest and north east moone maketh high water.

At Liet in the Haven a southwest and by west moone maketh full sea.

The floud falleth alongst these coastes southsoutheast and the ebbe north-northwest.

At Orcanesse and Boecknes a southwest and northeast moon maketh high water.

The floude come about from behind Scotland from the westwards through betwixt Fayrhill and Orcanesse, and make thereabout full sea with a southwest and northeast moon.

From Boecknesse, the floud falleth south alongst the coast towards Liet, and the ebbe north to the contrarie.

In this fareway it is deep 40, 50, and 60 fathom, in 45, and 51 fathome, you may see the land. In this faraway in the Sommer the first Herrings are caught.

How these lands doe lye one from the other, and from other lands.

From Cromer to Blackeney westnorthwest 3 or 4 leagues

From blackeney to bornum through within the sand well 7 leagues

From bornum to Chappel westsouthwest 2 leagues

From Chappel to Ellekenock, or the north point of bostondeep, the course is

northwest and by north 5 leagues

From hence to the north point of Cromer n. and n. and by west 7 leagues

From the north point of the Hommer to Flambrough-head n. n. w. 9 leagues

From the point of Crommer of Shield to the Tessel east 40 or 42 leagues

From the north point of the Crommer to the Tessel east and by south and east

southeast 60 leagues

From Flambrough-head to Fyley north west 3 leagues

From Fyley to Scharbrough north west 2 leagues

From Scharbrough to Widbye north west and by west 5 leagues

From Widbye to the Teefe, the course is first westnorthwest and afterwards w.

and by north 7 leagues

From the Teefe to Tynmouth northnorthwest 8 or 9 leagues

From VVidbye to Tinnmouth, the course is northwest and S. E. 16 leagues

From to Cocket Iland northnorthwest 8 or 9 leagues

From Tinnmouth to Stapels north and by west 16 leagues

From Stapels to Barwyke westnorthwest 3 leagues

From barwyke to S. Abbens-head northnorthwest 5 leagues

From the Stapels to S. Abbens-head north west 8 or 9 leagues

From S. Abbenshead to the bas 4 leagues

From the bas to Incketh west and by north 5 leagues

From S. Abbenshead to the Iland May north west 4 great leagues

From S. Abbenshead to Rifsnes north west and by north 5 great leagues

From Rifsnes to Doonde northnorthwest 5 leagues

From Tinnmouth to Schuytenes northeast 140 leagues

From Tinnmouth to the Naze northeast and by east easterlye 103 leagues

From Tinnmouth to the Seawe east northeast 136 leagues

From Tinnmouth to Holyland east and by south easterlye 106 leagues

From Rifsnes to Stone bay north and by east 16 leagues

From Redhead to Monros north west 4 leagues

From Monros to Stone bay northeast and by north 4 leagues

From Stone bay to boecknes northnortheast somewhat northerly 16 leagues

From Aberdine to boecknes northeast 12 leagues

From boecknes to Phyloort or Spyloort northnorthwest 3 leagues

From Phyloort to the point of Eglyn west 10 leagues

From the point of Eglyn to the haven of Rosse or Luvernes west and by south,

somewhat southerly 7 leagues

From cape de Terbare to Catenes northeast and by north 16 leagues

From boecknes to Illoy westnorthwest 5 leagues

From boecknes to Catenes north west and by north 21 leagues

From boecknes to the Orcanays north and by west 26 leagues

From boecknes to Hanglip, or the fouth end of Hitland n. and by e. 53 leagues

From boecknes to Schuytenes east and by north 69 leagues

From boecknes to the Naze east somewhat southerly 88 or 90 leagues

From boecknes to boevenbergen in Iutland east and by south 104 leagues

From boecknes to Holyland southeast and by east easterlye 123 leagues

From boecknes to the Tessel southeast southerly 125 leagues

From boecknes to the Holmes before Yarmouth southsoutheast somewhat ea-

sterlye 98 leagues

From Aberdine to the Holmes before Yarmouth s. e. and by s. 93 leagues

Heights.

Yarmouth lyeth in 52 degrees 52 minuten

The north point of the hommer of hull in 53 degrees 20 minuten

Flambrough-head lyeth in 54 degrees 5 minuten

Scharbrough in 54 degrees 12 minuten

Tinnmouth or the River of Newcastle in 55 degrees

Tinnmouth or the River of Newcastle lyeth in the height of 55 degrees

S. Abbens-head in Scotland in 56 degrees 12 minuten

Boecknes lyeth in the height of 75 degrees 50 minuten

Catenes in 58 degrees 32 minuten

The greatest or the outermost Iland of the Orkenays in 59 degrees 8 minuten

How these Lands doe shew themselves at Sea.

Huntleyfoot

Redcliffe

Teefe

Hartlepoole

Einton

Schel

Sonderland



Thus sheweth the land betwixt Tinnmouth and the hills of Huntleyfoot and Redcliffe, to the southwardes of the Teefe, when you saile alongst by it.

Flambrough-head Fyley Scharbrough Robbinhoods-bay Whitbuy Huntleyfoot Redcliffe



Thus sheweth the land betwixt the Tees and Flambrough-head when you saile alongst by it.



Thus sheweth the land betwixt Tinnmouth and Cocket Iland



In this form sheweth the land Catenes, when you saile alongst by it.



Thus sheweth Boecknes when you saile alongst by it.



Thus sheweth the northeast point of Orkenes when you saile alongst by it.



Thus sheweth the land of Scotland to the northwardes Aberdine, when you saile alongst by it two leagues from the land.

The eleventh demonstration.

*Where in are seth forth the coast of Fayer-hill, Hitland, and the Ilands thereabout, as also the Ilands off Fero
and some Ilands behind the northwest corner off Scotland.*

Fairhill:



He Iland Fairhill lyeth from the east point off the Orcanais northeast, and from Boecknesse North and by west about 3 7 leagues.

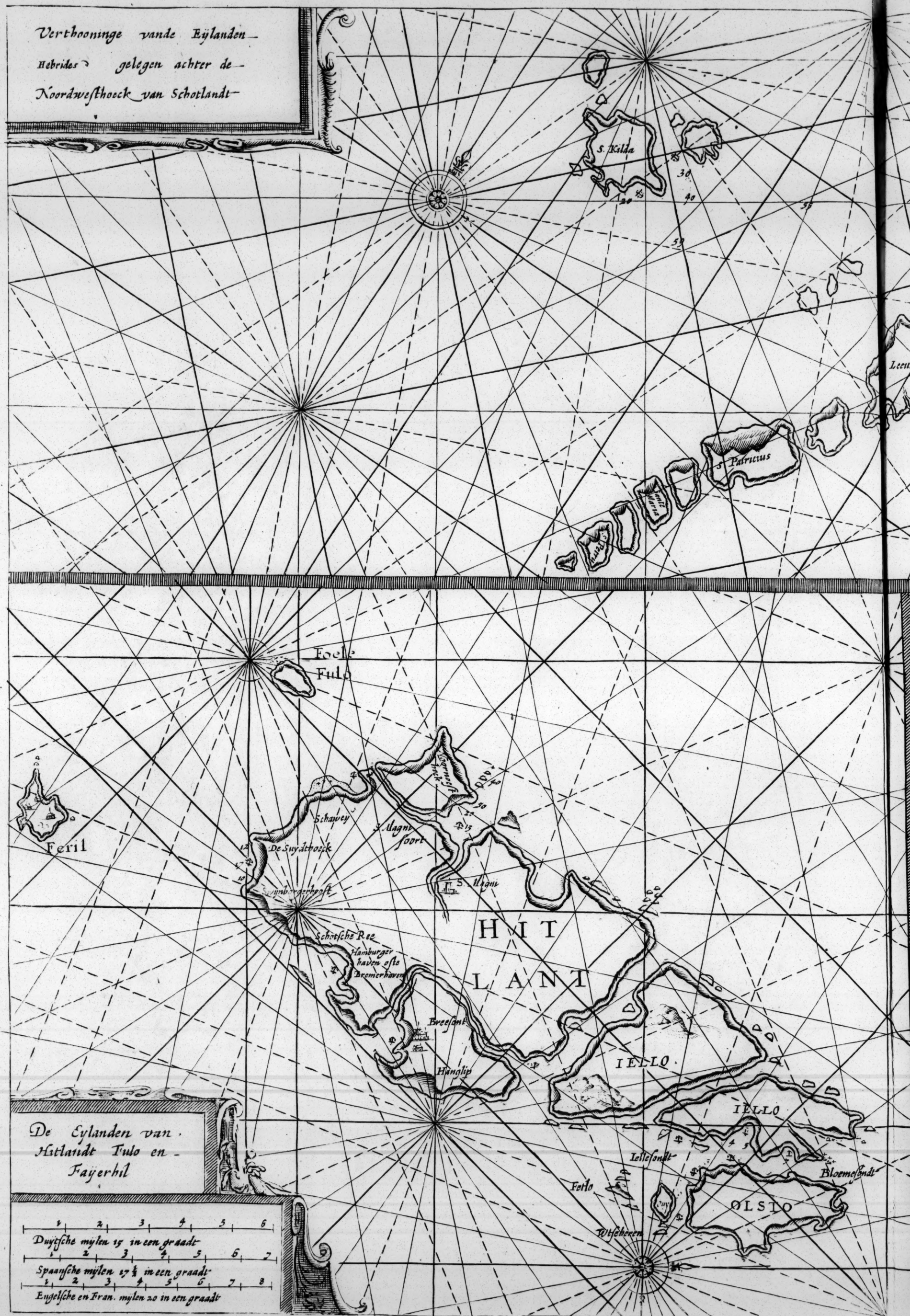
On the west side off Fairhill is at some places foule ground, but upon the southeast side is good anckerground, there you may ancker every where.

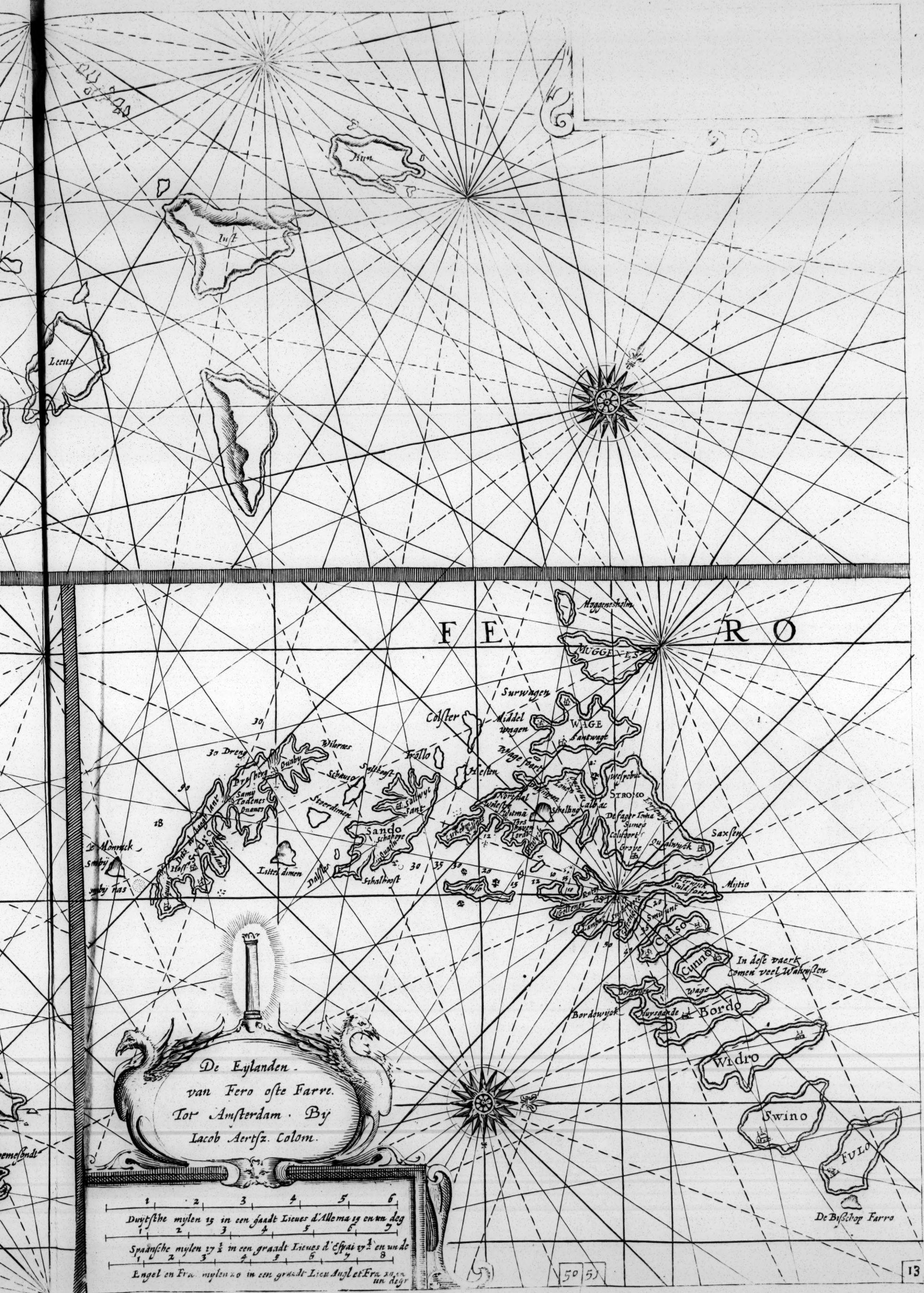
Fulo lieth from Fairehill N. W. and by north 10 leagues, betwixt them both lieth the southermost point off Hitland, lying from Fairehill northnortheast 7 or 8 leagues, and from Fulo east and by south, 4 leagues.

The southwest coast of Hitland, (to wete from the southermost point off the northwest point) lyeth northwest and by north

Fulo.

Verthooninge vande Eylanden
Hebrides gelegen achter de
Noordwesthoek van Schotland





De Eylanden
van Fero ofte Farre.
Tot Amsterdam. By
Jacob Aertsz. Colom.

Duytsche mylen 15 in een graadt Lieues d'Allemas 19 en un deg
Spaansche mylen 17 1/2 in een graadt Lieues d'Espas 17 1/2 en un de
Engel en Fra. mylen 20 in een graadt Lieues d'Angl et Fra 20 en un de

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north seven or eight leagues. On the same southwest side, over against the Iland Fulo lieth a Sand-bay, where men may anchor, but on the east side of this Bay, it is somewhat foule. From that northwest or west point off to the North end, the land of Hitland lieth Northeast and Southwest seventene or eightene leagues.

Two leagues to the northwards off the foresaid West point lieth the Haven of S. Magnus, which is a broad Sound, within it is good anchor ground in 16 or 17 fathom depth, according as you shall be farre within the lands. On the North side lieth a high rocke, where you must run in to the southwards of. And on the southside lieth 2 or 3 rocks, which you must leave on the starboard side, when you saile in there.

Even to the eastwards about the S. point of Hitland, lieth a faire Sand-bay, where you may anchor in 12, or 13 fathom, from thence to Hanglip, the cours is n.e. somewhat easterly 9 or 10 le.

Between Hanglip and the S. point lieth an Iland, which you may saile about on both sides, within it, lieth Hambrough haven, or the Scottish haven which is a lade place for the Hamburgers and Scots. This haven is also called Bremer haven. There lieth also a high steepe point to the southwards of Hanglip, to the S. wards of it men doe runne into Broad sound, the chiefest haven of all Hitland, which is deepe and hath cleane ground, there men doe lye landlockt for all winds.

From the Broadfound lieth a sound in alongst to the n. wards, through the land, which cometh out againe into the Sound to the N. wards, and so maketh an Iland of the land whereupon the high hil Hanglip lieth. When as you wil saile in there from the N. wards, that is to the n. wards of Hanglip, you must run in nearest by the S. shoare, and edge to it betimes. In this channell betwixt both lands lye 2 Ilands or rocks, the greatest lieth nearest the N. shoare, & the smallest nearest the S. shoare, betwixt them both lieth also a suncken rocke, which at low water is uncovered, and at high water you may know it by the breaking upon it. When as you will saile in here, you must leave the foresaid greatest rocke, with the suncken rock, on the starboard side, and the smallest rock on the larboard side, there is upon the shouldst 3 fathom and a halfe water.

Within this haven lye also 2 havens at the N. point, which lye into the land, where is good lying.

When as you wil saile from this foresaid haven throug with in unto Broadfound, you shall meet, scarce halfewaves with a rock, from which lieth of a riffe towards the West shoare thwart of it you must runne close alongst by the west shoare, for to avoid that riffe.

To the N. wards of Hanglip, the land of Hitland lieth n. and n. & by east, & N. N. E. at last N. and at some places, you may saile in through Hitland, especially to the N. wards of Hanglip, where a faire broad sound lieth N. W. through, there is good anchor ground to finde at some places, for these that are there acquainted. From Hanglip to the N. E. point of Hitland, the course is N. N. E. 10 leagues, there lye some outrocks called the Outscars. From thence alongst to the N. point of Hitland, the course is N. about 4 leagues.

Outscars

Bloem-found.

A litle about east point goeth in a faire haven, called Bloem-found, lying in f. w. On the w. side lieth a long rock, you must saile into the eastwards of it, & anchor a litle within the haven, it is there within all cleane sand ground, and good lying Bloem-found lieth in first (as hath been said) S. S. W. afterwards S. and S. and by E. on both sides is good anchor ground, there you may saile altogether through, and come out againe through Ielle-ground into sea, about the Iland Fero.

Names off the Ilands of Fero.

The greatest and chiefest Ilands of Fero are 12 in number, as Suydro, Sando, Moggenes, Wage, Stromo, Oltro, Calfo, Cuno, Bordo, Wydro, Swyno and Fulo.

The little Ilands of Fero are ten, as Littledymen, Stoerdymen, Schuyfo, Dalsfles, Hefden, Trallo, Colster, Moggenesholm the Monck, and the Bishop. Besides these there are yet some rocks and little Ilands, to 7 or 8 in number.

Suydro.

Monck Somby.

The southermost great Iland called Suydro, lieth most S. E. and N. W. about 7 or 8 leagues. At the S. E. end of this Iland lieth a high rock, called the Monck, or Sambie, after the name of the first or southermost haven in Suydro. Betwixt the Monck and the S. E. end of the Iland Suydro, is a race or Well, which men must avoid especially with spring tydes.

Upon the W. side of the Iland Suydro are no havens for to save any shippes, but it is altogether high steepe land. On the northside are manie havens, where men may saile into and save ships, as Sommerfound or Hest, Hofwyke, Vrobie, Quaelbie or Rane, all broad sounds or havens, a countrie man or Pilot can bring you in there every where to your desire.

Moggenes holm

From the Northwest end Suydro to Moggenesholm, the westernmost and outermost Iland of Fero, the course is N. W.

and by north, and northnorthwest about 8 or 9 leagues.

At the east end of Moggenesholm lieth Moggenes, to the eastwards of it lieth the Iland Wage, and to the eastwards off Wage goeth in a faire Sound from the southwards of from the Iland Sando about Hefden and the Iland Colster, for you may run in about these Ilands on both sides, & leave the great Iland Stromo & the east side, and so come into Wage. In the middest of the sound of Wage, goeth up a haven to the eastwards in to the great Iland Stromo, there in you may anchor in 10 or 12 fathom, but the Sound is at least 20 fathom deep.

Moggenes and the northeast end of Fero lie eastnortheast or a litle more northerlye, and westsouthwest about 15 leagues asunder. Betwixt them both lye tenne Ilands, and betwixt each Iland, is a faire broade and deep sound whereof the fourth off from Moggenes is called Somfound. All these Sounds lye most northnorthwest and southsoutheast through the land, and upon all these Ilands stand Churches, except upon Oltia, which never the lesse is a great Iland.

From the southeast end of Suydro to Schalhead, or the south east end of the Iland Sando, the course is north and by w. about 5 leagues. Betwixt Suydro and Sando lye the little Ilands, little Dymen, Stoer Dymen, Schavo and Dalsfles.

From Schalhead untill within the Iland Mulso (lying before Stromo) the course is n. and by w. 4 leagues, there you may every where anchor, where you will in 20, 13, or 14 fathom. If any man comming in out of the sea, desireth to see a good road or haven under the Ilands of Fero, he shal keepe that middlemost great Iland Stromo northwest and N. W. and by W. from him, and then hee shall see upon the middest of the Iland Stromo a high steepe hill called Schellinck, which he must saile right in with, and so he shall meete with that foresaid Iland Mulso, a low Iland, which you may saile about on both sides, but is best for to run in there at the south end, under this Iland is all over good anchor ground. Right over against this Iland, on the great Iland, lieth Torshaven, the chiefest haven of Fero, where al the trade of Merchandize is.

From Torshaven or the Iland Mulso to the n. e. end of Fero the course is n. e. and n. e. and by east about 12 or 13 leagues, betwixt them both lye 7 Ilands, & betwixt each Iland (as hath been said) goeth a broad Sound thorow the land, lying through about n. w., n. w. and by north, and n. n. w. The n. end of Fero is about 4 leagues broad, and lieth n. w. and s. e. and is calleo Fulo, thwart of it lieth the Bishop.

He that desired to saile of from Mulso in to Somfound, let hem goe on n. e. & by n. 3 leagues, unto the point of Bordenes, then up n. w. of from Bordenes, & then he shal espie a Church upon the Iland Calfo, which he must leave on the starboard side, and goe in along w. n. w. untill he come in to the Bight of the Iland Oltro, and anchor there in 17 or 18 fathom.

These Ilands of Fero lye in a triangle, it is from the south-east end of Suydro to Fulo, or the N. end of Fero n. n. e. and s. s. w. 21 leagues asunder.

From Schotland westwards and to the northwards of Ire-land, lye many Ilands, whereof we shall here describe some, with so much perfectnes, as thereof is yet knowne.

The names of the principall Ilands lying there these: Arou, Ila, Iona, Mulla, Bragedull, Hun, Lewis, S. Patricius, S. Maria, S. Colane, S. Petous, Epth, and S. Kilda, these are the greatest. There are yet some small Ilands: as Rona, Ghent, Trauta, Fladde, Grand Melul, Petit Melul, Stalpan, Cannay, Rum, Egghe, Mule, Cutte, Camdenbrough, Gronfay, S. Karbo, Lismont, Swynoy, Machare, Gegay, Caray, and Navarfay. Al these Ilands doe lye and belong under Schotland, and are those which by the Cosmographers are called Insulæ Hebrides.

The Iland Barre or Rona is the northermost Iland lying behind Scotland, and lieth from Fulo about westsouthwest 37 or 38 leagues, it lieth by two other little Ilands about a greater league one from the other.

The Ilands of Lewis lye from Rona southwest distant 16, or 17 leagues, and from the north edd of Lewis to S. Kilda, it is S. W. and by W. 16 leagues.

On the east side of S. Kilda is a good roade for a w. and. n. w. winde. This Iland lyeth by the other little Ilands, whereof the two are not very great, upon that which lieth to the westwards, you may see some houses stand, and those two little Ilands lye 10 leagues to the westwards, of the great Iland of Lewis. Upon the coast of Lewis lye also two rowes of great rocks, like as if they were little Ilands, lying one from the other S. and N. somewhat easterlye about 7 or 8 leagues.

The southermost lye by 3 little Ilands, but the northermost lye by 8 small little Ilands or rocks.

The Iland of Lewis is divided into many parts, the which men may saile throug at many & divers places, Lewis with the Iland

Moggenes wage.

Somfound

Schalhead little Dymen Stoer Dymen

Torshaven

Fulo

the Bishop

Names off the Ilands

Barre or Rona

Iland belonging to It lye S.S.W. and S. & by W. about 29 leag.

But on the east side goeth a broad Sound through of 5 or 6 leagues. Men sail in close by the Island of Lewis, about south-southwest untill past the Island Cheut.

From thence the Sound lieth through betwixt the great Island Bragadull and Lewis south and south and by west towards the west end of Lewis, called the Ephts, then you must leave Mulla & Ila, with divers many other Ilands on the larboard side.

Jona, Ila, Mulla and Bragadul are foure of the greatest Ilands, which are lying on the west coast of Scotland, and lye close by the main land, but there are many havens and Sounds, so that there you may saile in and about them every where.

At the northwest point of Ireland lye also some Ilands, which you may saile through and round about them all.

Betwixt Rona and Orkanays lie also some Ilands which also you may saile through betwixt and round about.

He that falleth with these Ilands must be very carefull and circumflect, for the most part of them are inhabited by wild and savage people.

In Lewis and the Ilands there about a southwest and northeast moone maketh the highest water, & likewise also without the north point of Scotland.

Of the Tydes and courses of the streames.

In Hitland within the havens and sound a. southwest, and northnortheast moon maketh full sea. The flood runneth there to the eastwards, and the ebbe to the westwards, especially at the south end and north end of Hitland, and to fall thwarte through the Sounds and havens.

In the Ilands of Fero a north and south moon maketh the highest water.

Under the Ilands of Fero goe very harde tydes, with great turnings, the flood cometh there out of the west and westnorthwest, and the ebbe out of the east

and eastsoutheast and fall so alongst through the Ilands, there you must reckon your tydes thereafter, when you will saile from the one Iland to the other, there are 2 weils or Maellheames, the one at the south end of Snydro, and the other a league within Schalhead at Quachues.

Although the tydes doe run so strong through these Ilands yet nevertheless it floweth not there foure foot up and downe.

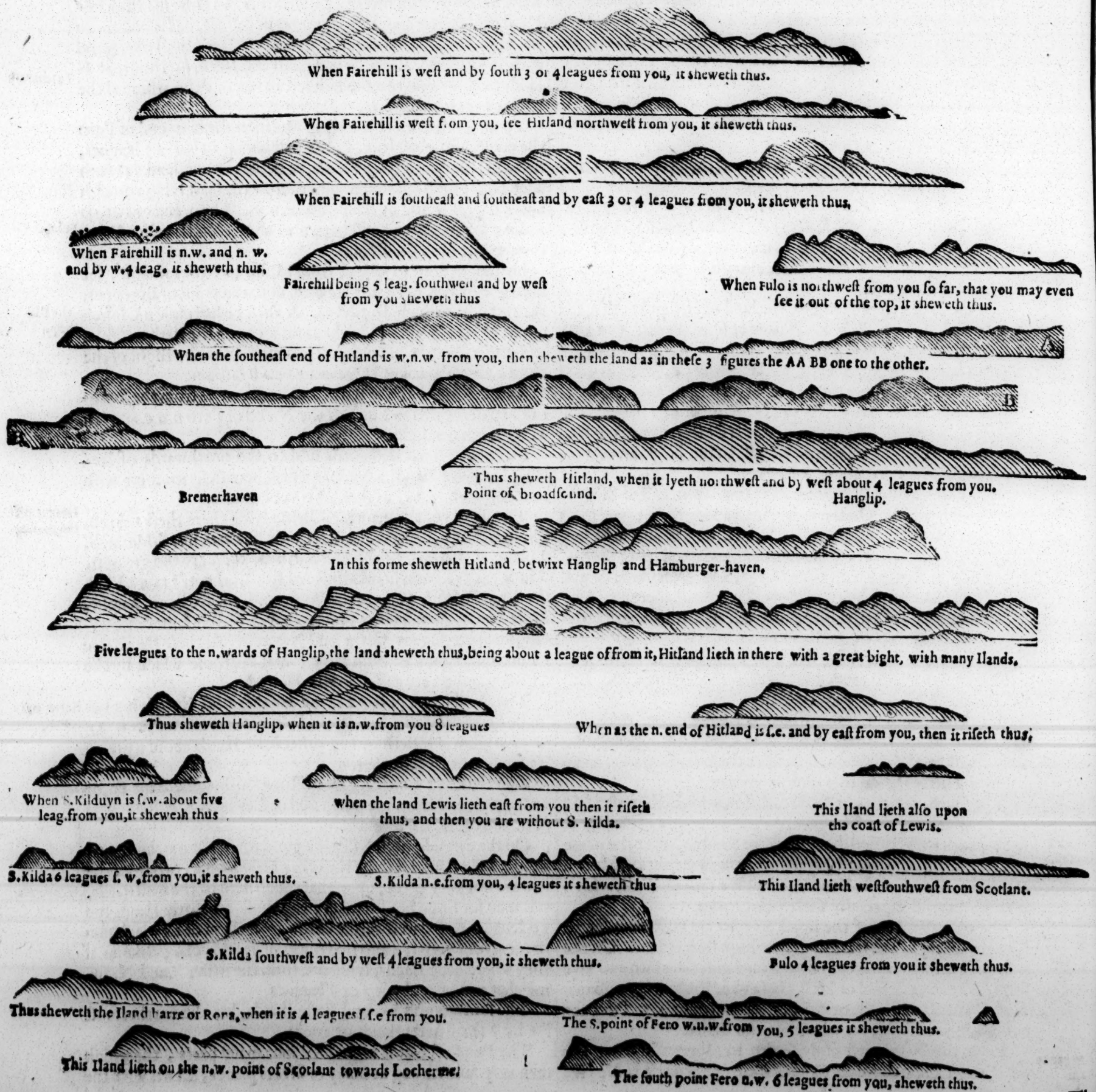
How these lands doe lye one from the other, and from other lands.

From Fairhill to the northeast point of Orkanays f. w.	9 or 10 leagues
From Fairhill to the south end of Hitland southsouthwest and south and by west	7 or 8 leagues
From the south end of Hitland to the Iland Rona W. S. W.	46 leagues
From the north end of Hitland to the rocks of Rokol f. w.	127 or 128 leag.
From the south end of Hitland to Fero w. n. w. and n. w. and by w.	61 leagues
From the n. end of Hitland to the f. end of Fero w. and w. and by n.	58 leagues
From Hitland to the east point of Island, the course is northwest, and by west about	130 leagues
From the north end of Hitland to Gryp N. E. and by east	125 leagues
From Hitland to Stadt eastnortheast	69 leagues
From Fero to Rona, the course is S. and by E.	45 or 46 leagues
From the south end of Fero to Rokol f. w. westerlye	85 leagues
From Rona to Lewis, the course is f. w.	16 leagues
From the north end of Lewis to S. Kilda f. w.	16 leagues
From the south end of Lewis to the northwest point of Ireland, the course is southsouthwest about	27 leagues
From S. Kilda to the north end of Hitland n. e. and by east	39 leagues

Of the heights of these lands.

The south end of Hitland lyeth in	59 degrees 48 minuten
The north end of Hitland lyeth in	61 degrees 45 minuten
The south end of Fero lyeth in	61 degrees 15 minuten
The north end in	62 degrees 20 minuten
The Ilands of Rona lyeth in	58 degrees 46 minuten
The north end of Lewis lyeth in	58 degrees 18 minuten
The Rock Rokol lyeth in	58 degrees 20 minuten
The northwest point of Scotland lyeth in	58 degrees 30 minuten

How these Lands doe shew themselves at Sea.



FIERIE-SEA-COLVMNE,

W H E R E I N

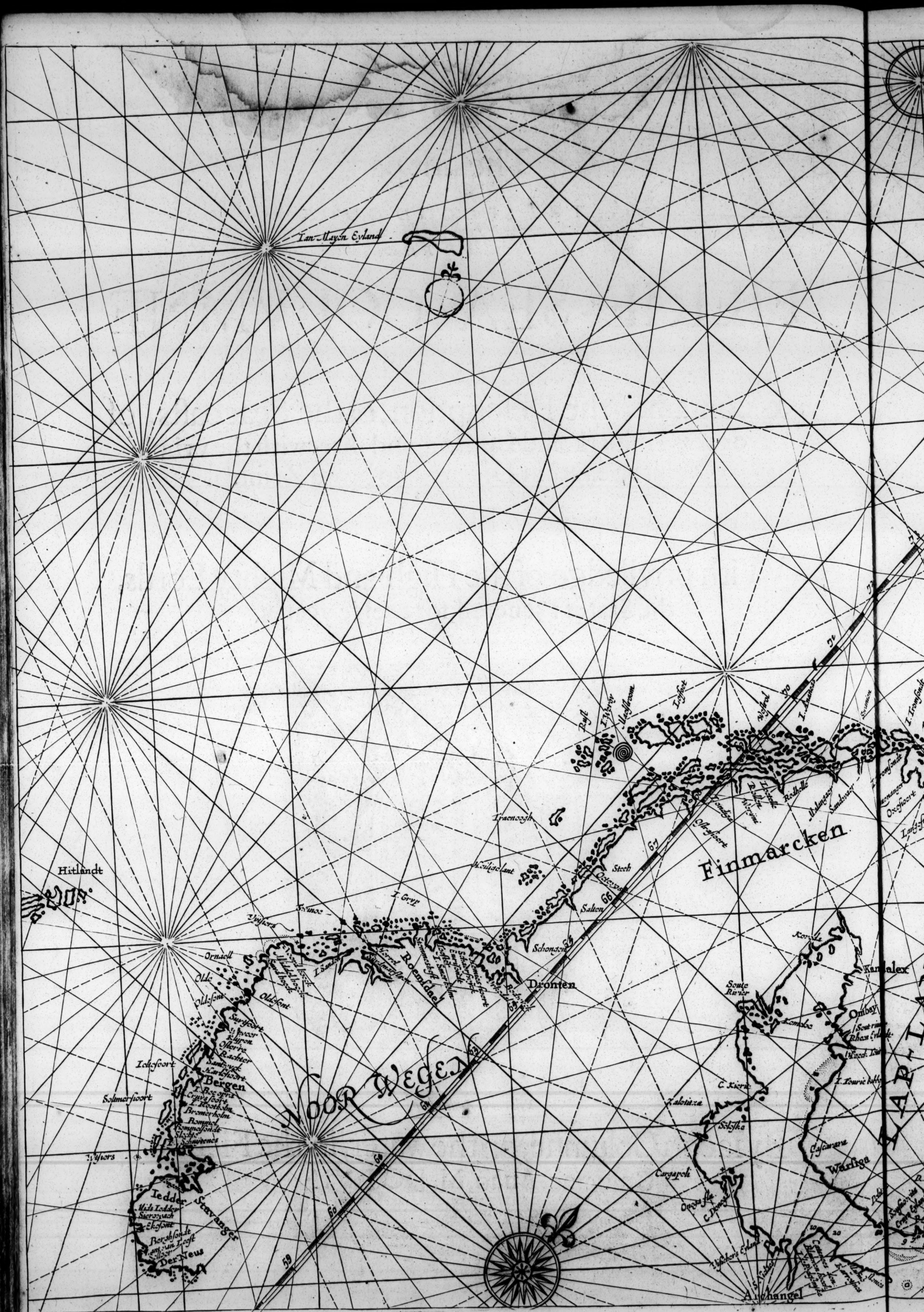
Is contained the Description, of the Seacoasts, of
Norway, Finmark, and Lapland, and therewith the vvhole
vvhite Sea, from Drontem to Nova Zembla.

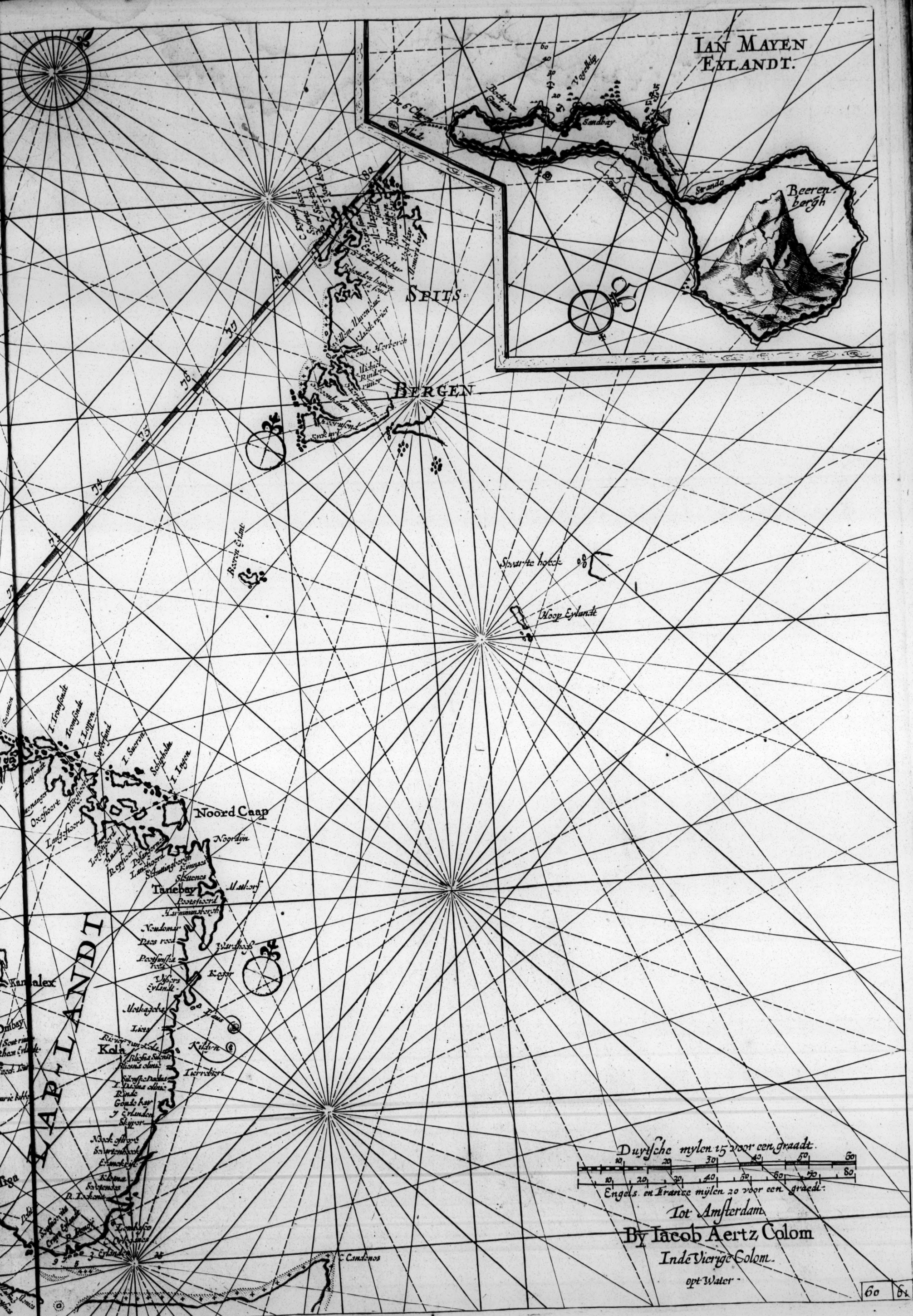
**VVith priviledge of the High and Mighty Lords,
the States Generall, for twelve yeares.**



Printed at Amsterdam,

By Iacob Columnne, on the water, in the Fierie
Columnne,





JAN MAYEN
EYLANDT.

SPITS

BERGEN

Beeren-
bergh

Noord Caap

Tanebay

Kola

Duytſche mylen 15 voor een graadt.

Engels. en France mylen 20 voor een graadt.

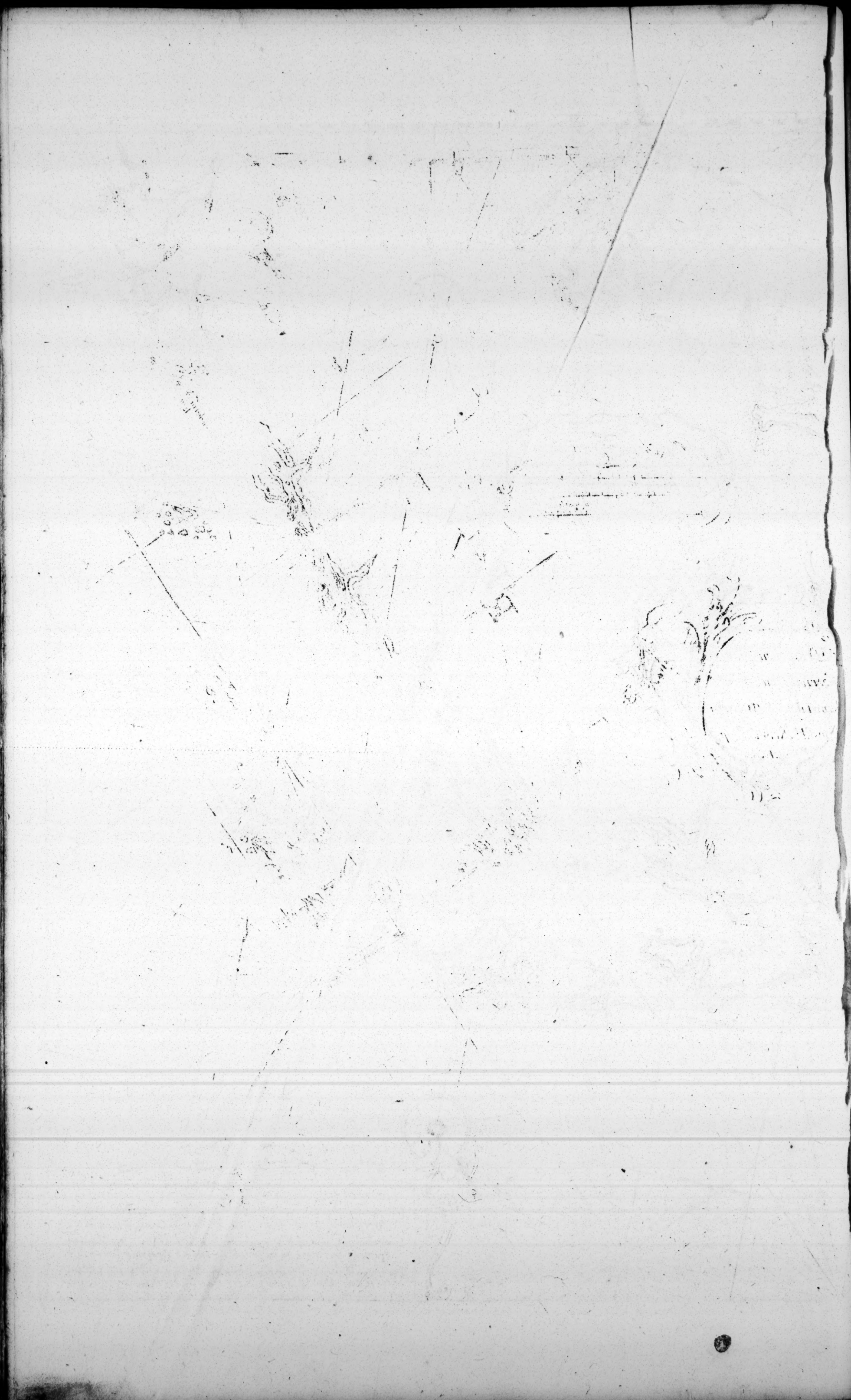
Tot Amsterdam

By Jacob Aertz Colom

Inde Vierge Colom.

opt Water.





The Second part of the Firie Columnne.

THE SECOND BOOKE,

Of the

E A S T H E R N and N O R T H E R N N A V I G A T I O N.

Containg

The description off the Seacoasts off Norway, Finmarck, Lapland, and the Whale White Sea.

The first demonstration,

Where in are set forth the coastes off Norway, from Dronten to the North Cape; as also John Mayes Iland, and the New-found-land off Spitsburgh.

Nomen-
dals Iland.

Holyland.
Traenoch.

VVero.
Loffoert.

Maelstram.

Sanien.
Tromfound.

Suroy

Fogelden
Skyrfeu.
Loppen.
Loppen-
kalf.

Altenbot-
en

Haefwyck.

Ingen

Reefsholm
Shipholm.

Rom the Iland Gryp to the Nomen-dals Ilands, the course is northeast, eightene leagues, but from Gryp to the Iland Rust, north and north and by E. sixtie foure leagues, betwixt them lye (besides the Nomen-dals Ilands) also the Ilands Holyland, and Traenoch. Traenoch and Rust lye thirteen leagues asunder. From Rust to Wero, the course is northeast and by north 9 leagues, but to Loffoert northnortheast three and thirtie leagues. Betwixt Wero and Loffoert lieth the Maelstram, where you may saile through, but at still water. By the west point of Loffoert you may runne in, and make roade under it. And also you may run through from thence within betwixt the Ilands and the main land, all along unto the north cape.

Betwixt the Ilands Westerholl, Sanien and Tromfound, you may also runne in at divers places, and make roade. Thwart of these Iland lye here and there in some places suncken rockes and foule grounds, a great league and more without the land. He that saileth alongst this coast, may be mindfull there of.

From the Iland Tromfound to Suroy it is eastnortheast 15, or 16 leagues to the eastwards of the Iland Tromfound goeth in the Tromfound betwixt the Iland Fogelden and S kyrfeu, as you saile in theae you leave the Ilands Loppen, and Loppen-kalf lying on the larboard side without the other Ilands, within it are divers Ilands bayes and sounds, where you may saile in, and seeke roade, as Oxefioert, Biurfioert, and other more.

Betwixt Loppen and Suroy men doe saile through Suerfound and Stiernorfound into the river of Altenbotten, & then betwixt them they leave on the starbordside Niusfioert, Oxefioert and Langefioert. On the larboard side about by the W. point of Suroy, on the land of Suroy, lieth a haven, where by is also a Fisher village, both called Haefwyke, Suroy is about ten leagues long, and lieth on the offside, E. N. E.

Nine or ten leagues to the eastwards of the Iland Tromfound, about three leagues without the land lieth a showld off rockes a little under water. John Huygen of Linschoten in this second voyage to Nova Zembla, in the yeare 1595 sailed with his shippe upon it in faire water and smoot water, that the sheating of this stemme was beaten of to ships; but after some beating the shippe turned of with the strong current. It is to be throug that there lye more then men can see, or as yet are discovered.

About five leagues east and by north from the east end off Suroy, lieth the Iland Ingen, betwixt them both lye also Reefholme and Shipholme little Ilands which you may saile about on both sides, untill under Ingen or Suroy.

When as you come in betwixt Suroy and Ingen, there lieth thwart of from Suroy towards the other land, a good haven.

called Hamerfeest. A little further in lye two high little Ilands, Hamerfeest and over against them roade called Slechtne. Betweene Hamerfeest and Slechtne, before that you get Slechtne, lieth a bay on the land of Suroy, where is a good roade in 25 or 30 fathom close by the shoare. A little past these little Ilands on the land of Suroy, over against the River of Alten, is a good roade called Goeshop a fair sandbay.

Between Ingen and the North-cape, or the Iland Maggereu lieth Helmschuy, an Iland which you may saile round about, having on the northwest side a bay, called Akerfioert, where men may make roade for southerly and easterly winds, on the south-east side is a bay called Knaarwyke, where men may make roade, and lye sheltered for westerly and northerly winds.

The North Cape is the northermost point of the Iland Northcape Moggereu, a little to the westwards of it lye the little Ilands of Stappen.

On the south side of Maggereu even about the east point, lieth Keelwyke a good haven. On the same S. E. side, by the southermost point of Maggereu, lieth a little Iland called Al-tenfoleu, the Sound betwixt that little Iland, and the land off Maggereu is called Maggereu-sound, there is good roade, and shelter for almost all winds: Men may runne in through Suerfound to the westwards of Suroy within Suroy, Ingen, Helmschuy, and other more Ilands to the southwards of them, along through divers channels to the southwards of Maggereu, and come out againe into sea betwixt the Northcape & Northkyn.

From the North cape westwards the coast lieth alongst the Ilands west & by south about 37 leagues, and then from thence westwards, it falleth away more southerly.

Of the tydes and courses of the streames, about these foresaid places.

On these coastes a southsouthwest and northnortheast moon maker full sea. The flood cometh there out of the northwest, and falleth alongst Finmarck towards the North cape.

Between Suroy, and the river of Altena southwest and by w. and N. E. & by east moone maketh high water.

At the North cape a s.w. and northnortheast moon.

To the w. wards of the North cape the streames come out of the n.w. and w. n. w. and fall alongst Finmarck towards the North-cape.

Courses and Distances.

From Rust the Loffoert northnortheast	33 leagues
From Loffoert to Sanien northeast	36 leagues
From Sanien to Suroy northeast and by east	43 leagues
From the Iland Tromfound to the w. end of Suroy e.n.e.	13 or 14 leagues
From the east end of Suroy to Ingen e. and by n.	7 leagues
From Helmschuy to the North-cape e. and by n.	5 leagues
From the North-cape to North-kyn and by south	12 or 13 league.

Heights.

The Maelstream lieth in about	68 degrees
The Iland Sanien in	70 degrees
The North-cape lieth in the hight of	71 degr. 30 minutes

How these Lands doe shew themselves at sea.



North

When this point with the * is w. f. w. from you it sheweth thus.



Northfoelen with the land to the westwards sheweth thus, when the point * is southwest and by west from you.

The land to westwards Foelen sheweth thus, when it is southwest and by south from you.
when southerfoelen is f. w. and by f. from you 3 leagues, sheweth thus.

Northfoelen south and by west from you 3 leagues, sheweth thus.



The east end of Westerholl sheweth thus, when as you saile alongst by it, about 7 leagues of from it.



These two figures belong at the crosses one to the other.



Thus sheweth the Island of Sanien, when the two high hills upon the east end are southeast and by south, and the point, with the clift south and by west from you 4 leagues. when as the two foresaid high hills upon the east end are south from you, then they are right one in the other.

Shipholm

Island without Suroy



Thus sheweth Suroy, as you saile alongst by it 5 leagues off.



When as Shipholm is southeast and the Island without Suroy is about 4 leagues from you, then they shew themselves thus.



Thus sheweth the Island Ingen, when it is eastsoutheast 4 leagues from you.

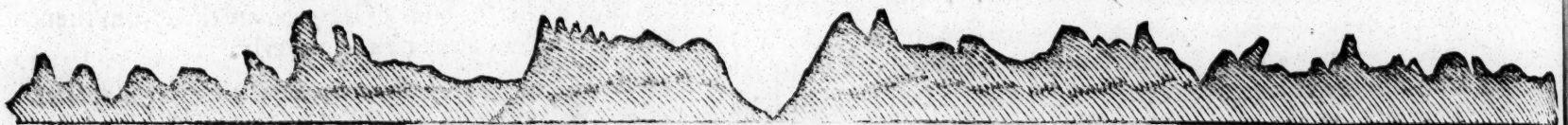


Road of Ingen

Thus sheweth Ingen, when this Hill is one league south and by east from you.



This Hill lying upon the Island Lappen, you may see over Suroy as you saile alongst by Suroy from the N. end to the S. end.



Thus sheweth the Island Lappen, when it is south and by west from you, 4 leagues.



Lappen south and by east from you, 4 leagues sheweth thus.



Lappen sheweth thus S. w. and by S. from you, 4 leagues.



When as Ingen lieth south thwart from you about 4 leagues, it sheweth thus, and then Shipholme lieth south and by west from you.

Long-Hill



Thus sheweth Ingen, when this longhill is southwest and by west from you.



When Helmsfey is south or somewhat more westerly about 3 leagues from you, it sheweth thus.



When as Helmsfey is f. and f. and by w. 5 leagues from you, it sheweth thus.



Helmsfey being f. w. 7 leagues from you, sheweth thus.

Southsouthwest



Thus sheweth Helmsfey being 4 leagues of from it, when the flat hill is f. f. w. from you.



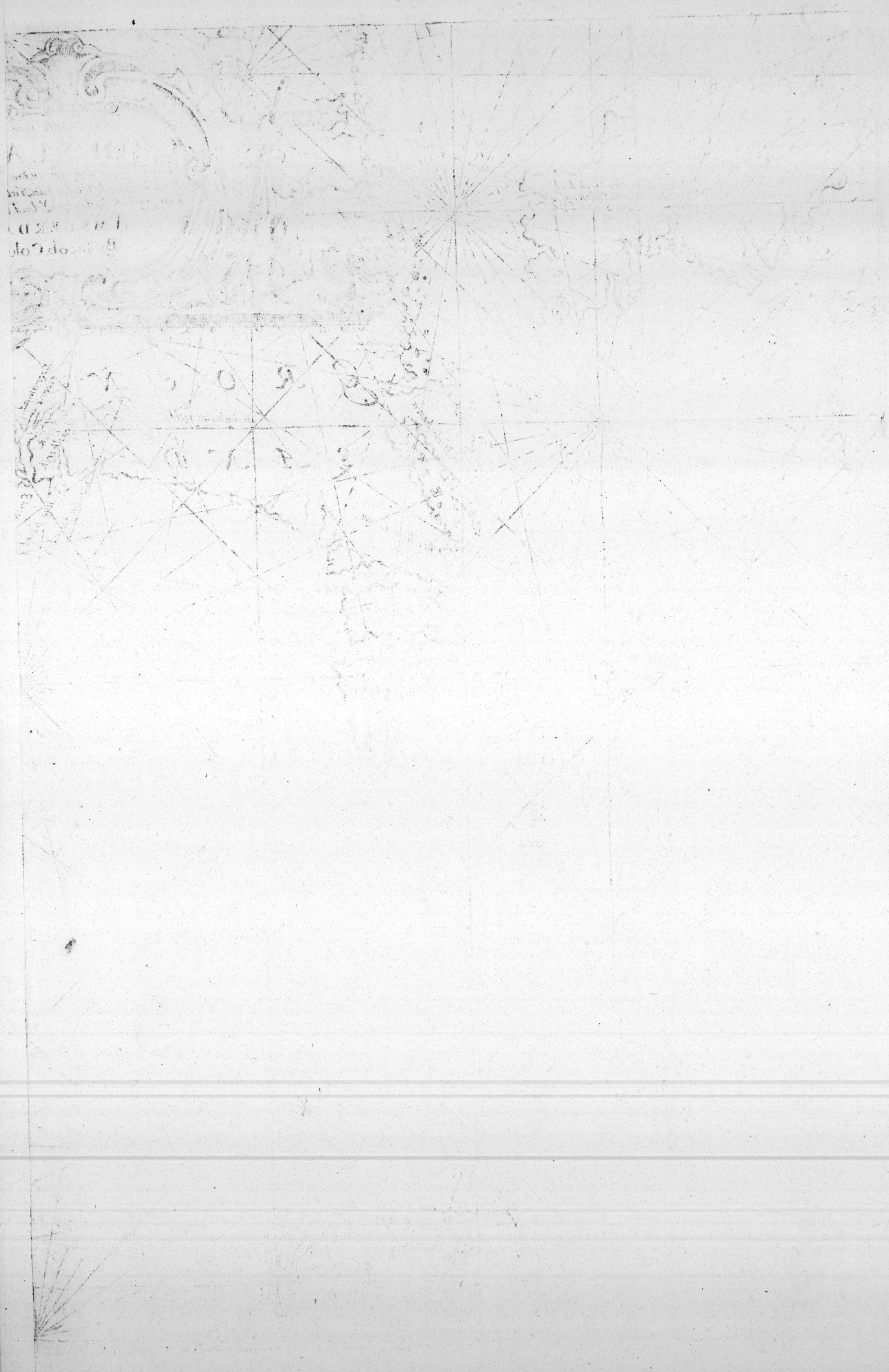
In this from sheweth the Island Stappen, when it lieth f. f. w. 4 or 5 leagues from you.

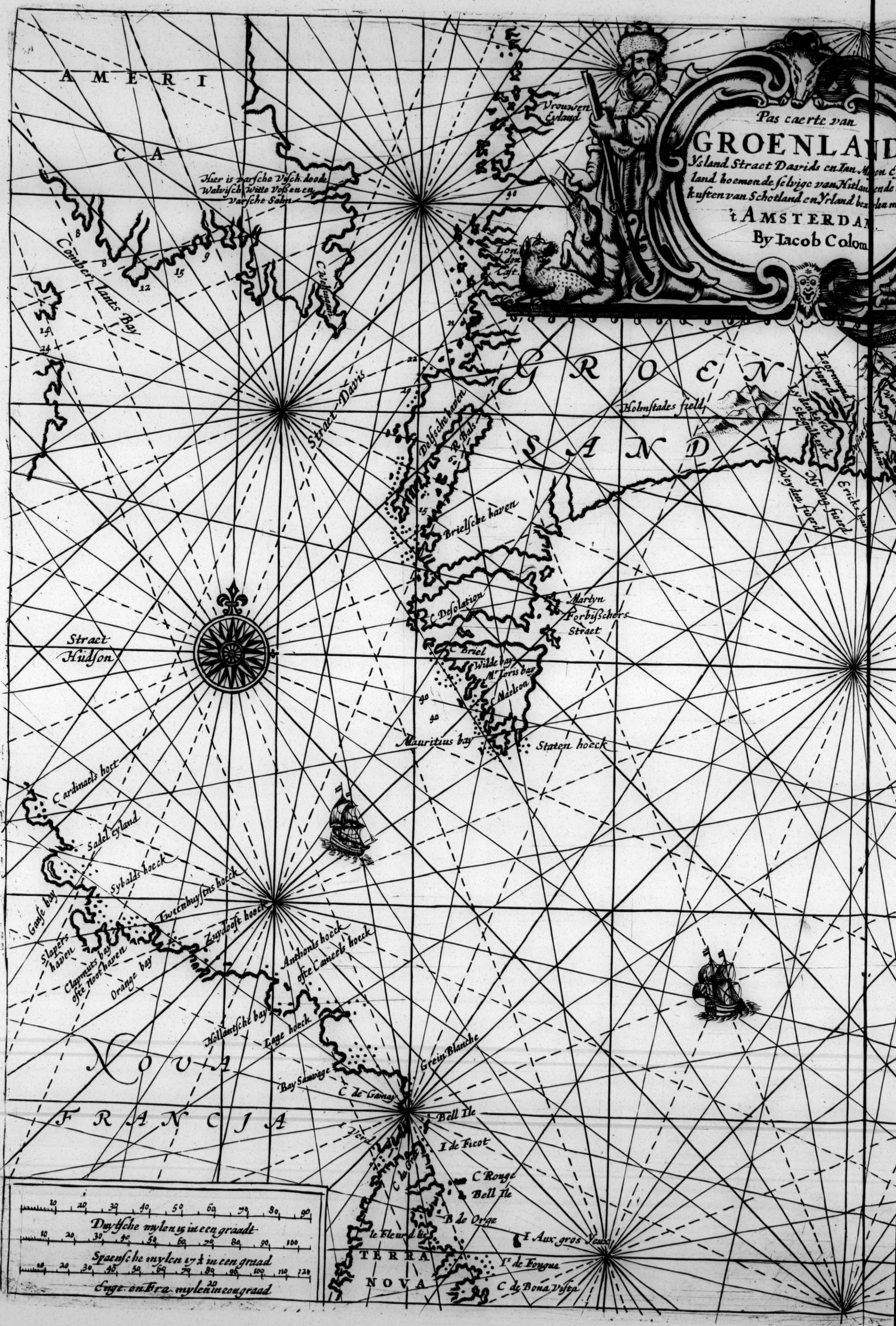
Thus sheweth Stappen, when it is 5 or 6 leagues f. w. from you.
North Cape south and by east.The east end of Stappen sheweth thus, when you saile alongst by it.
The Mother with the Daughters southeast and by south.

Thus sheweth the North Cape sayling alongst by it, the point being from you as above is shewed.

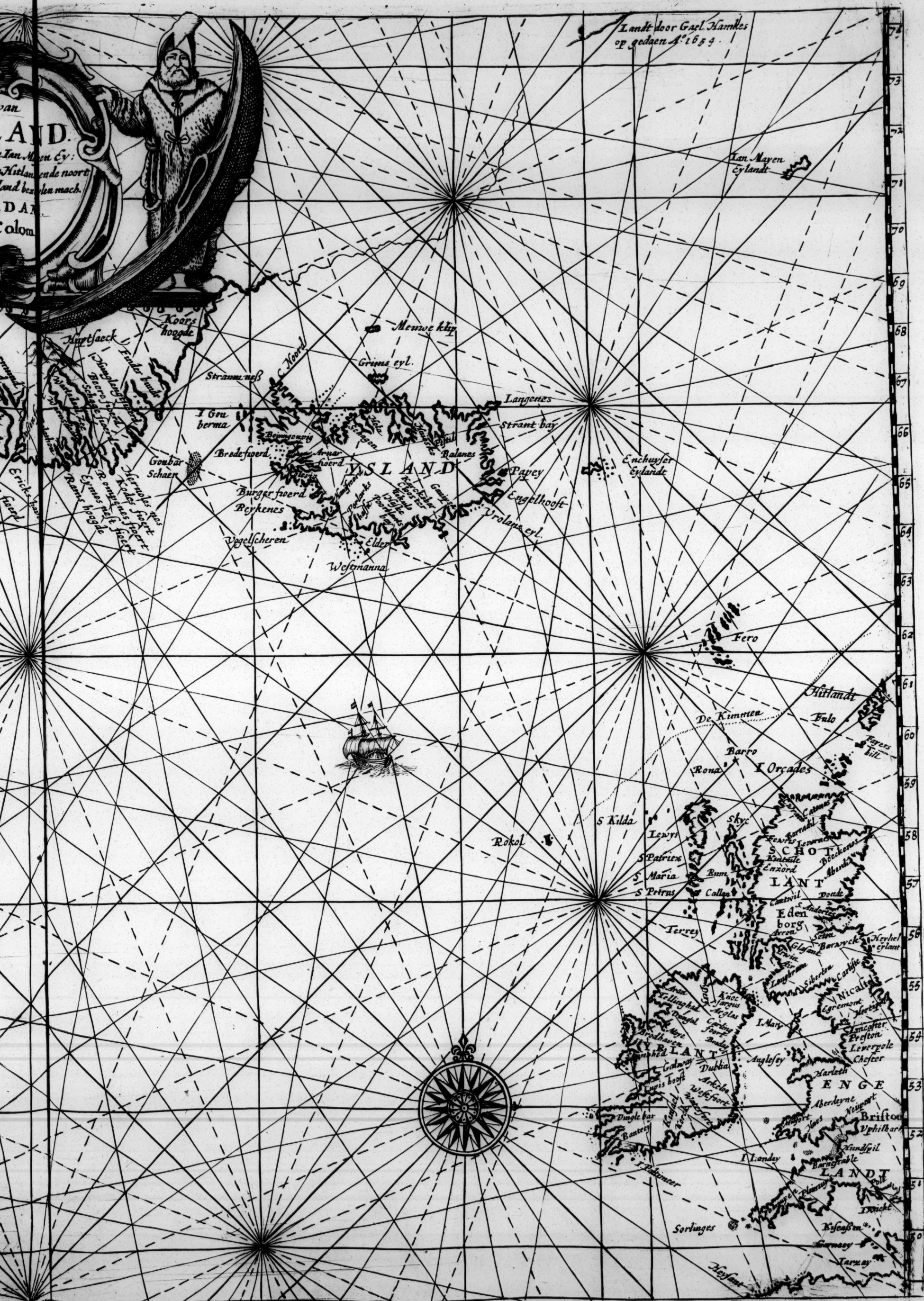
South

is.
Suoy
at 4 leagues
as you
South



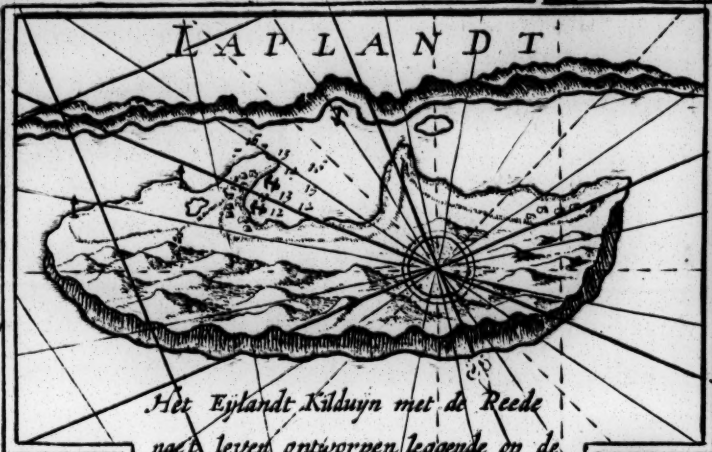
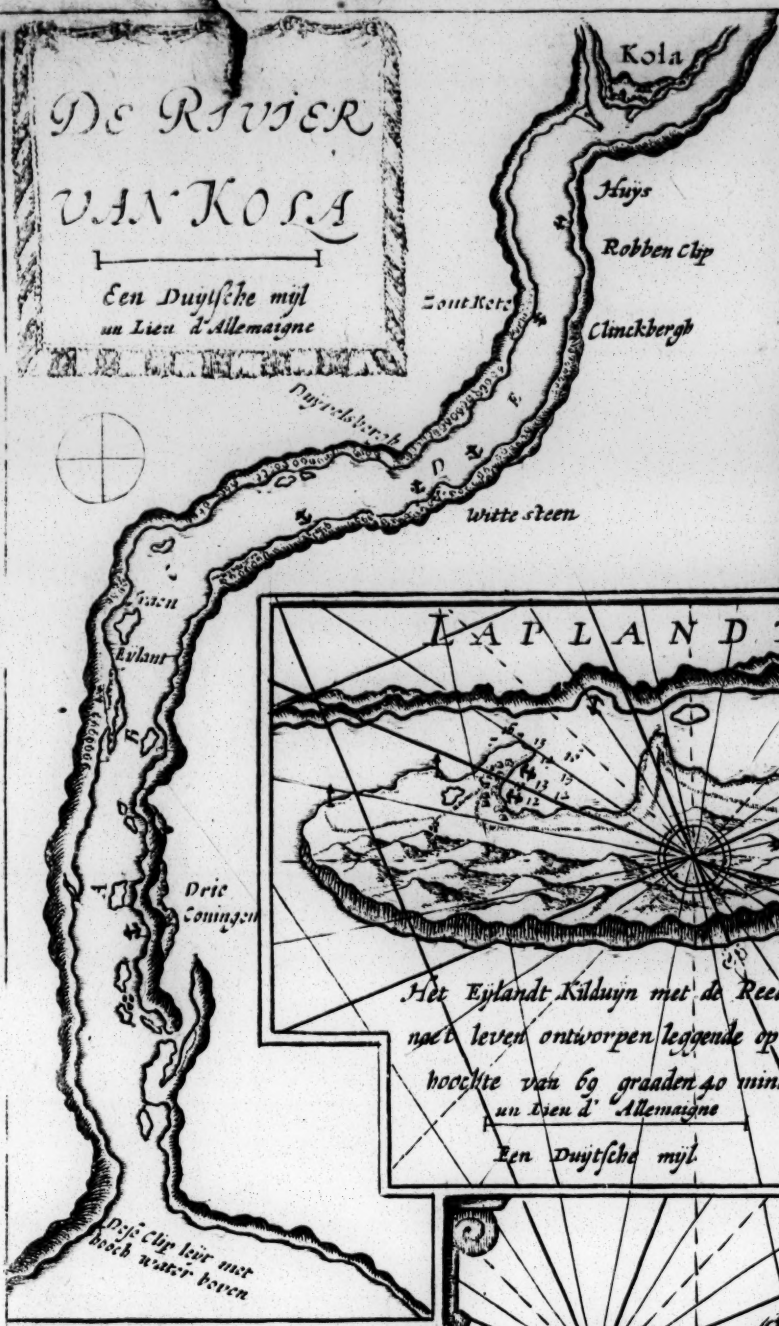


20 30 40 50 60 70 80 90
Duytsche mylen is in een graadt
20 30 40 50 60 70 80 90 100
Spaensche mylen is 17 1/2 in een graad
20 30 40 50 60 70 80 90 100 110 120
Engl. en Fra. mylen in een graad



DE RIJVER VAN KOLA

Een Duytsche mijl
en Lieu d'Allemagne

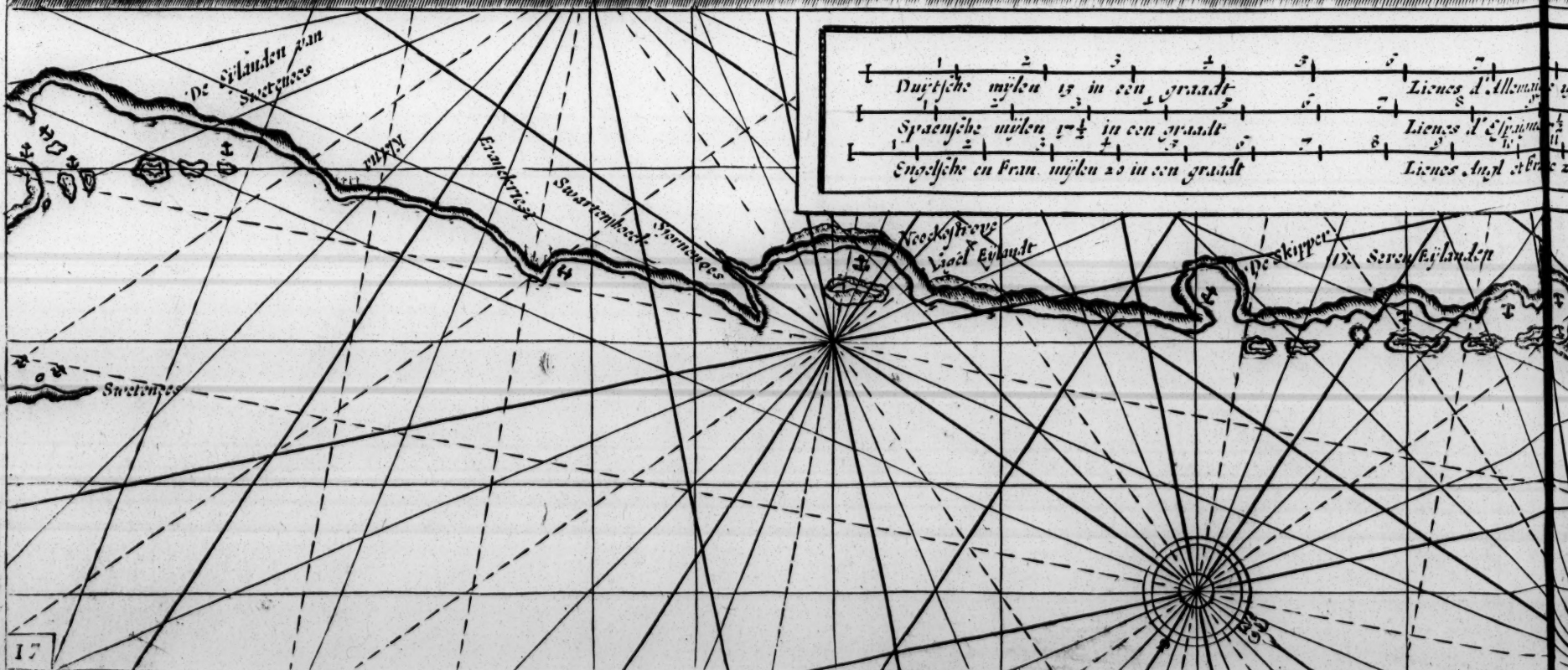
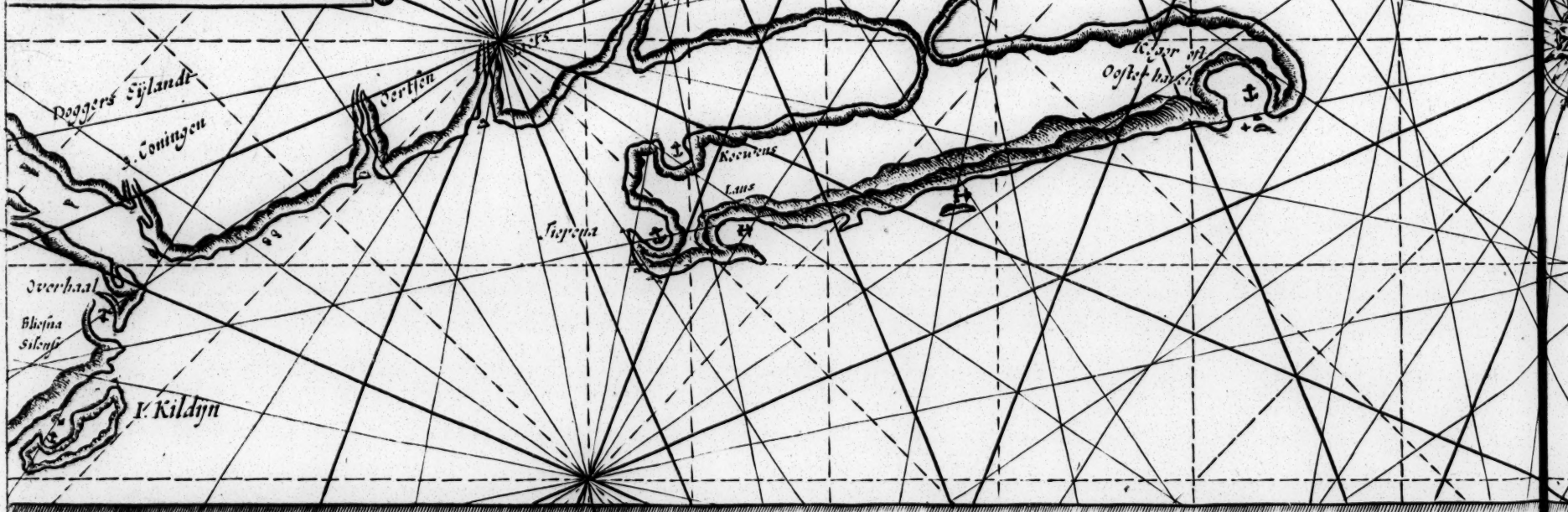


Het Eylandt Kilduyn met de Reede
naet leven ontworpen leggende op de
hoochte van 69 graaden 40 minuten
en lieu d'Allemagne
Een Duytsche mijl

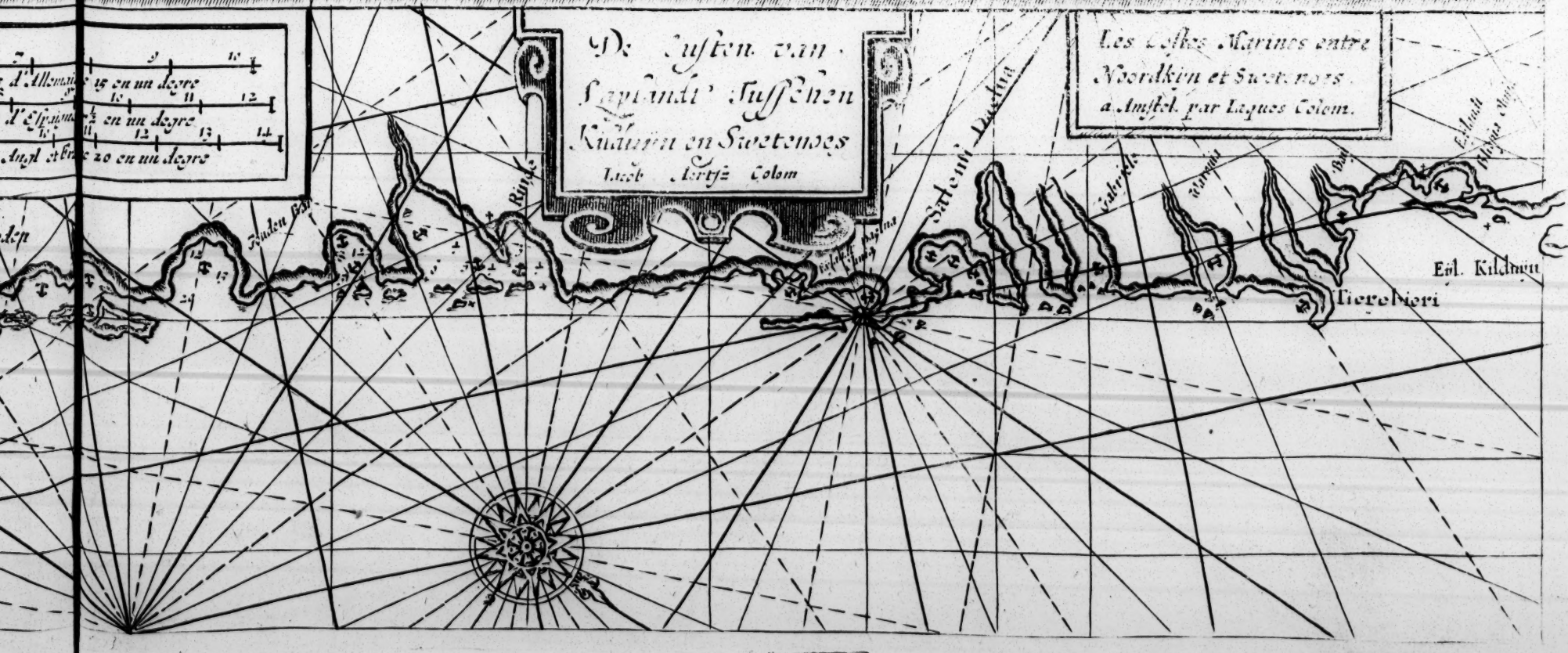
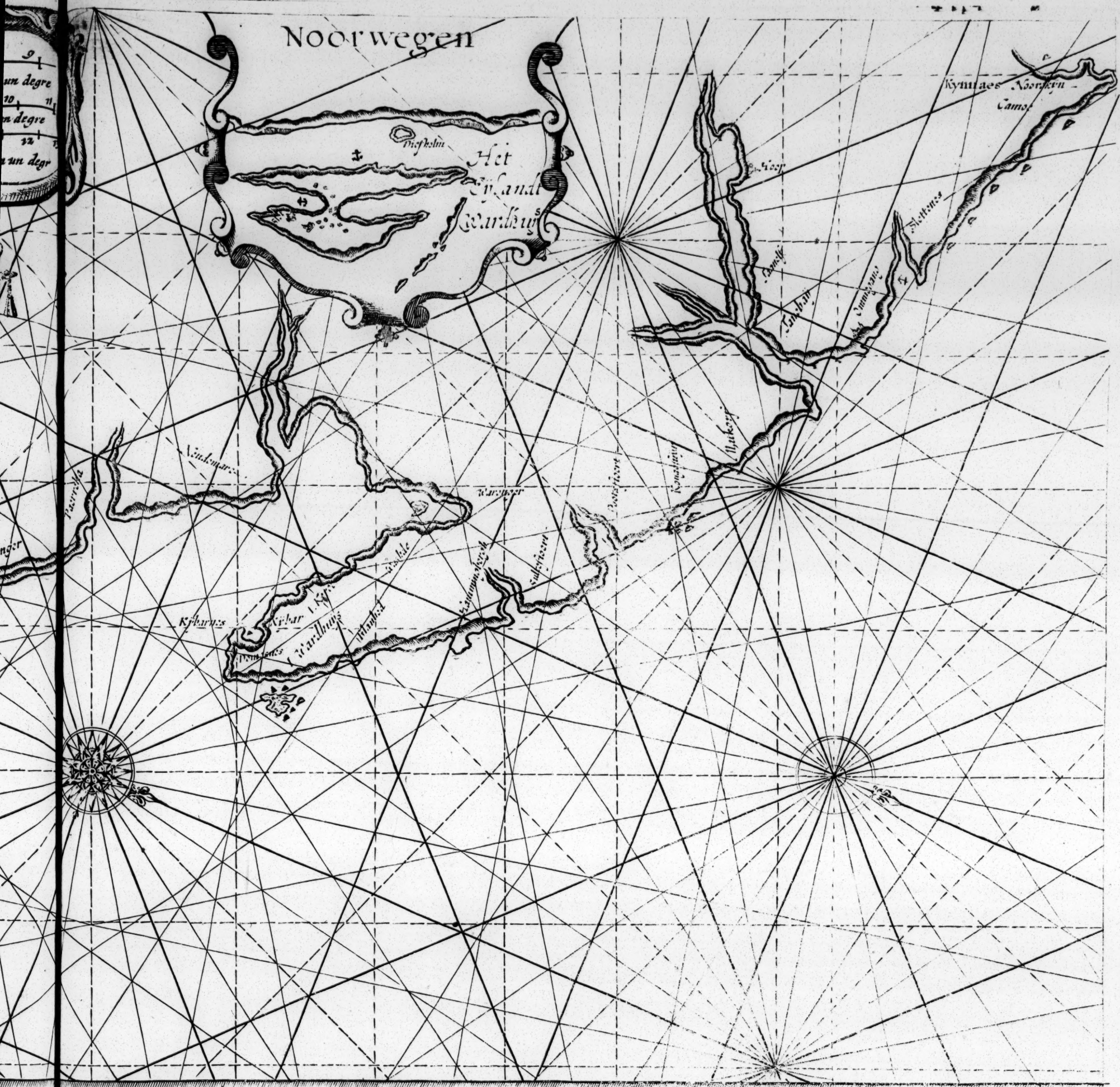
Duytsche mijlen 15 in een graadt
Lieuens d'Allemagne 15 en un degre
Spaensche mijlen 12 1/2 in een graadt
Lieuens d'Espagne 12 1/2 en un degre
Engel en Fran. mijlen 20 in een graadt
Lieuens Angl. et Franc. 20 en un degre

De Custen van Noorwegen. En Lapland. Tusschen Noordkijn en Kilduyn.

Iacob Aertsz. Colom.



Duytsche mijlen 15 in een graadt
Lieuens d'Allemagne 15 en un degre
Spaensche mijlen 12 1/2 in een graadt
Lieuens d'Espagne 12 1/2 en un degre
Engelsche en Fran. mijlen 20 in een graadt
Lieuens Angl. et Franc. 20 en un degre



1. Alleman 15 en un degre
2. Sapianti 12 en un degre
3. Sapianti 11 en un degre
4. Sapianti 10 en un degre

De Zuyden van
Sapianti Susschen
Knauden en Suetens
Lucb. Aertje. Colm

Les Costes Marines entre
Noordkijn et Suet. nars
a. Amstel. par Laques. Colm.

Eol. Kildner
Hierobiori

South and by east.



Noord-kaap.

The Noord-kaap south and by east from you sheweth thus.



Rust east and by south from you sheweth thus.



when the Mother with the Daughters eastsoutheast from you, is, the land sheweth thus.



When the North-cape is southeast, and the Mother with the Daughters southsoutheast from you, then they shew themselves thus.



Thus sheweth the North cape sailing alongst by it about 3 leagues from land, when you are close by the land, you may see the Mother alongst above the land, Northkyn. Mother with the Daughters.



Thus sheweth the North-cape, when as the Mother with the Daughters are southsouthwest 4 leagues from you, then the Northkyn lieth southsoutheast from you, as is here above demonstrated.

Southwest and by south

Southwest

Southwest and by west.



Thus sheweth the North-cape the point being from you, as standeth there abouts Written and then you may see the Mother from the harches appeare even above water.



Thus sheweth the North-cape, when it is west and by north from you, and that you are 3 or 4 leagues without Northkyn. Southsoutheast.



Thus sheweth Northkyn being southsoutheast 8 or 9 leagues from you, then lieth the north cape 9 or 10 leagues southwest from you, and then between both you may see yet more land in the southsouthwest.

The second demonstration.

In which, are sheweth the Seacoastes betweene the North-cape and Swetenoes.

Northkyn



Ast and by south aboute thirteene leagues from the North Cape lieth North-kyne. From North kyne to Tannebay it is east-southeast tenne leagues, between both, it is all a cleane coaste, without rockes or foule grounds, a high steepe craggie land, without anie strand.

When as you come sailing alongst past Northkyne, towards Tannebaye, you shal meet first with the pointe of Slechnes, a plaine point lying out, verie good to be known: & then Omega a Fisher village, standing on the sea side, even there to the eastwards of it goeth in the Tannebay, which is a great deepe river, which lieth in first south, & afterwarde f.w. farre within the land, and doth devide it selfe into 2 parts, at the mouth of the river, it is at least 2 leagues or more broad, and all over verie deepe. He that is bound into the Tannebay, must run in alongst by the w. shoar, because he must lie by west shoar, on the e. side is no roade or place, where men may ankor.

Tannebay

On the foresaide west side are manie pointes and bayes to see to, as if there where roades, but you must saile past them all so long, untill that you see on the same west shoare a rounde hil, whereupon standeth a Warder, a litle past that, stand some Fishermens houses, upon a lowe hommock, thwarte of these houses runneth of from the land a lowe flatte pointe, you must run in behinde that point, and ankor before those houses, which an ankor to seaward and a hawser fast on the land.

Matkorf

ward house

A litle to the eastwards of Tannebay lieth the pointe, and the land off Matkorf, from thence to Wardhouse the Coaste lieth southeast and by east, southeast, and most southeast and by south sixteene leagues, betwixt them there is much high plaine land. Halfe wayes betwixt both, but nearest Wardhouse, lieth a high hommock upon the high land, to see to like a castle, or Countrie house, verie good to be knowne, bein thwarte of it close by land, it semeth as if there where a great Sounde, where men might saile into Wardhouse are three litle islands with some litle rocks also by them, to the southermost is the greatest of the three, which onely is inhabited, upon it is a vil-

lage of about 300 Norwaye houses with a castle, it is abouts a league long, and lieth an English mile of from the land, lying as the coast most south and north, betwixt both, it is all over deep Water. On the south side of this island, lieth in a haven or great baye about half wayes the island, and likewise one also on the north side, so that these two bayes doe come so neare one to the other, that there remaineth no more then a narrow chindle strand about a stone cast broad, dividing so the island almost into two, the eastermost part is the shortest, and highest, the westermost is the longest. Close upon the strand, on the E. side of the sonther-haven lieth the Castle, to the northwards of it, upon the foresaide chindle strand, and about the Baye stand the houses. In the souther Bay it is good lying, but the best roade is betwixt the maine land and the Island, about halfe wayes on the side of the island against a Sandbay, and right against the Castle, there is good ankor ground, in tenne or twelve fathome landlockt for all winds, except for north and south winds, which blow there right through, yet men hare some shelter of some point of the island. Men may without feare come in there, betwixt the island and the Maine, eyther from the southwards or the northwards, it is all over cleane and cleare, but he that commeth in from the Northwardes, must runne somewhat nearer the Rock, where the gallows standeth upon, then the island, because thereaboutes the island is a litle foule.

Roade Kildaya

About a shorte of a Cast peece northwardes from the greatest, lye the 2 smallest close one to another, seeming a farre of to be one island, are together not an English mile long, but high and rockie to see to, there lye also 2 or 3 rocks by them.

On this coaste like as at the North-Cape a N. E. and S. W. Moone maketh high Water.

From Wardhouse to the point of Keger or the Fishers island, the course is S. E. and S. E. and by S. 10 leagues.

Betwixt them both is a great Baye, where in are divers Sound and Rivers, amongst other the River Pitfing, which is a great faire and large River, where men may goe in with greate shippes, a good wayes within the river is good roade, there

there is taken and laden must Sammon, but there fall no other speciall wares. Southsouthwest from the point off Keger lie two Ilands, to the Southwardes of them men doe runne into Monnick-forde.

Keger or
Fishers
Iland.

Keger is a faire haven, lying at the north end of the Fishers Iland, a little without the pointe; There lie two or three rocks at the North-point of Haven, and also a suncken rock in the middest of the Havens mouth: you must leave the suncken Rock, with the other Rocks on the starboard side of you, and run in by the south shoare and edge then behinde the foresaid rocks, and anckor there in seven or eight fathome, the Havens mouth lieth in Southwest, it is there so good lying as in anie havens thereabouts on the Coast.

Easter ha-
ven.

The Danes call this haven Easter-haven, there was wont to be the staple of the Fish, where every one must come to buye: thereof the Iland is yet called, whereon Keger lieth the Fishers Iland.

It is indeede no Iland, but very neare: it is fast to the maine land, with such a very small neck, that the Ruffes, which come from Kilduyn, or the River of Cool, and are bounde to the river Pitsing, doe hoe alongst within this land, and hale their boates over that small neck, for not to goe about a seaboard.

Laus.

From Keger to Laus, the course is alongst the shoare south-east and by south, somewhat easterlye nine or tenne leagues. This is a right plaine Coast, without points or bayes, all alongst by Laus to Tiepena, but the south pointe of Laus lieth out a little, upon which stand two Warders, to the northwards of that pointe is the haven of Laus, a faire sand-baye, there is very good lying for southerlye or easterlye winds, but not for northerly winds, the Winds betweene the northernmost and northeast doe blowe therein open, and make therein a very graet hollowe sea, men lie there in twelve, tenne and eight fathome, according as they runne farre in, the farther the shoulder, but all cleane rising sandground.

Tiepena.

From Laus a little towardes Keger lieth a little Iland, behinde which is good anckoring for easterlye wiudes, in cleane sand-ground, but it is somewhat narrow.

From Laus to Tiepena, it is a great half league, at the point lie some little rockes, but you can not see them, before you be close them. Tiepena is a faire haven, when you come from the northwards, you must runne so farre to the Southwards, alongst by the shoare, untill that you see open into it, and saile in amidst the Channell. When as you come from the Southwards, the Haven openeth it selfe, being come in, you must edge up to the northwards, and anckor there, there you lie landlockt for all winds, there are no dangers which may hurt you, but it is over all cleane sandy ground.

A little aboute the pointe, to the Southwards of Tiepena, which is on the Southwest side, of the Fishers Iland is another faire haven, where men may goe to anckor, called Kowens.

From Laus to the river of Cola, the course is south and by east and southsoutheast about 10 leagues. But Kilduyn and Laus lie S.E. and by S. somewhat easterly and N.W. and by north, somewhat westerly, also 10 leagues asunder.

The River
Cool.

For to saile up into the River of Cool or Cola, you must goe from Laus, or the southend of the Fishers Iland towards the River Southsoutheast and South and by East run about by the high land of Poden-wolck, and then the river shall open it selfe very wide. When you are by the point of Laus, you may see the Iland Kilduyn, and the river of Coole, or the land by it. Betwixt Laus and the River of Coole, is also a great baye.

When as you are in the mouth of the River, it lieth in first south and by west, & then southsouthwest, to that Iland, which standeth marked with A in the Carde of this, River, and then by little and little southwest and by south, alongst by the Iland marked with B unto the Traine Iland then southwest and by west, and by little and little about the point west and by south, afterwards in west, unto Divels point; over against it lieth the White stone, which lieth upon the land, thwarte of it is good roade. From thence againe west and by south, westsouthwest, southwest and southsouthwest unto Cool.

Road in
the River.

When as you com into the river, and will seeke roade there, you must keepe alongst by the west shoare, being somewhat within you shall see a little Iland lying close by the shoare: from thence somewhat further about the high pointe is a Bight or baye, and in that Bight a Sand-baye, where men may save a shippe without anckor or cable, that is a faire Sand-baye, where men may runne in all alongst.

Alongst by the north side it is five fathome deepe, and cleane sand-ground, men runne in there betwixt the two pointes, but there lieth a black Rock in the narrow, betwixt bothsheares, which they must leave lying on the starboard side, within that rock it is three and two fathom deepe unto

the strand, within there is faire Greene field.

A little without the baye lie two Ilands, whereof the outermost or eastermost is the smallest. When as in sailing up alongst the river, you may come by these two foresaid little Ilands, about halfe wayes to the Iland marked with A, there is also good roade, at the west shoare, you shall see upon the high land three Warders, called the three Kings thwarte of them is the roade, Roade 3
Kings.

When you are somewhat past the Iland A you can not see the river any more open, but it seemeth to be shut, and close; for that Iland by A commeth then under the high land, on the east side.

Under the Iland marked with B is also good roade and clean sand-ground. Roade.

Likewise is also good roade under the Traine Iland, that is reckoned for the halfe of the River, to wete, off from the mouth of Cool.

When as you come now a little past the Traine Iland, where the C standeth, then you shall see out a head a black blewe hil, called the Divels hil, it seemeth there to see to, as if the River where close and shut. It is best sailing alongst by the starboard side, there you have most all ground close by the land. There are many bights, points, and bayes, which are not all to be described. Divels hil.

On the other side men doe not come so commonly, (except it be against their wills) there seeme also to be many bayes and roades, and also some little Rivers. When as you come alongst by the Divels hil, where the D standeth, past the White stone, then you may see the Klinck-hil on the westside, and almost all alongst unto Cool. When as you may see the Klinck-hil, there is ground by the west shoare for to anckor in, then there are on bothsides no daungers, but when as you come so far into the place, where the letter E standeth marked, there you must somewhat shunne the west shoare, because of a little showld which shooteth off from the shoare, and keepe in the middle of the channel, untill that you come against the Clinck-hil, there you must againe goe close alongst by it, in the middest of the fareway lieth an Iland of rocks, which at high water is covered, whereof you must take good heed. Klinck hil.

From the Clinck-hil unto the Robben Iland saile al alongst by the west shoare, the Robben Iland is also covered at high Water, but when it is under water, then anckor thwarte of the burnt trees. Thwarte of the Robben Iland lieth a very great rock, as soone as you be thwarte of the high land, looke out carefully for it, and keepe without it, or to the northwards of it, to wete a bow shot, there is the roade, there you may anckor by the shoare so shewld as you please, it is there good lying, and there you begin to see Cool alongst by the house. Betwixt the Iland Kilduyn and the river of Cola, somewhat nearer the river then the Iland, lieth a haven, called Bliesna Silensfi, that is to say, the nexte to Silensfi, there you saile in by a round red-dish Hommock, being come within it, you must edge to the westwards, so that the haven is altogether shut, and that you can see no sea, you may anckor there so deepe or should as you will, it is there every where cleare & cleane white sandground, and somewhat oazie & softe, there you may also without feare saile on against the shoare in the oazie, and so may save a shippe without anckor or Cables. Robben Iland.

The Iland Kilduyn is about two leagues long, & one league broad, and lieth westnorthwest and eastsoutheast alongst the land, like as also the channell betwixt the Iland and the maine land, which is at some places about a halfe league broad, and at some places narrower, but all over very deepe and cleane. About the middest, yet nearest the east ende, is a faire close roade, betwixt two points, that lie out towards the maine land, there men lie under the Iland, close to the shoare, before the Laps tents, under the eastermost point, which is a low plaine point, in twelve, thirteene, or fourteene fathome, sandground, more to the southwards, it is very deepe, you shall soone have 50 and 60 fathome. Kilduyn.

If you will goe to anckor under Kilduyn coming from the northwards or the westwards, then run about by the west end, in betwixt kilduyn and the maine land. When you are come somewhat within, you shall espy a litle round Iland, there the Channel beginneth to be narrow, yet it is broad enough for to turne to windwards through, saile forth towards the south-east end, untill you come in betwixt those two points, and run to the foresaid low point, and anckor there within the bight, before the Cabbens so neare to the land as you please, there you lie landlockt for all winds, as if you lay within a towne in a close haven. For to sail into kilduyn from the westwards.

For to saile in from the eastwards, you must saile in to the westwards by the east end, so long untill that you come by the

For to sail into kilduyn from the eastwards.

the foresaid low point of the Iland, then edge up about it to the northwards, and runne into the foresaid bight, before the Cabbens, and anckor there in twelve, thirteene and fousteene fathom, that is the chieffest roade.

At the north and east end of Kilduyn, betwixt the Iland and the maine land, there is also a very good roade, in eight, tenne or twelve fathom, where men may lye sheltered for all winds. Thereabout is on the Iland a good water place, there the Water nommeth running of from the high Land, there men may goe lye by it, and fill ther caske lying in the boate.

Yoy may also anckor under the maine land, betwixt the narrow, and the Roade of Kilduyn, at the place where the anckor standeth marked, in the Carde. At the east end of Kilduyn lieth also a Fishers village, called Kammen, at a high point, which is called the Sacrifice point.

From the Iland Kilduyn to the point Tiribiry, the course is southeast, and southeast and by east about five leagues, betwixt them is a great Bay. In this bay, a great league from Kilduyn lieth a high Iland called Bliefna, Olinie, which is next or the nearest Olinie, behinde it, under the maine land, nearest the south end of the Iland is a good roade, where three or four ships may lie verie well.

Bliefna
Olinie.

There lieth a round hill, or high Hommock upon the maine land, which sheweth out above all the other hommockes, and is very good to be knowne, upon which standeth a high crosse of two crosses one above the other, to the northwards of two crosses lieth a flat point, thwart of it lye some Rocks alongst the shore, which at high Water are covered.

A the south end of the Iland Olinie, a litle from Land, lieth a rock almost even with the Water, but you may alwayes see it well by the breaking of the Water.

To the northwards of the Iland about an English mile, lieth a rock not farre from the Land, and also to seawards from it a funcken rocke, which you can not goe over at low Water.

He that will (comming from the northwards) goe to anckor behinde Olinie, must runne a good wayes to the eastwards off this foresaid rock alongst to the Northwards of the Iland, for to avoid the foresaid rock. Beinh come behinde the Iland, you shall espy the foresaid round hommock with the Crosse, you must not run past the crosse, but leave it on the larboard side, and saile in close by it for to avoid the foresaid rockes, which lye off from the flat north point, the point with the Crosse is very cleane and so steepe, that you might lye with a ship on against the shore without any hurt.

He that will come into this Roade from the southwards, let him run alongst by the coaste, which is very cleane, untill past the foresaid point with the Crosse, and edge up close by it, as is before said.

Men doe anckor within the point in seven, sixe, five, foure, and three fathom, so deepe or should as they will, there can no grown sea at all.

About halfe wayes betwixt the Iland Olinie and Tiribiry is another haven or great Bay, where men may lye landlockt for all winds.

Tiribiry. Tiribiry is a great River and off-water, where is a great Sammon fishing, there men may goe in with great shippes, and anckor every where within it where they will in good sandy-ground, it lieth in most south, and afterwards more Westerly, the eastermost point lieth out more to Seawards then the other, so that it maketh a Bay, where men ride undea for a northwest winde.

Two leagues to the southwards of Tiribiry lieth Waronia, which is a great sand-bay or haven, which at the mouth is narrow, but within it is a broad found, there is also an off-water, where is also much Sammon caught.

Within this bay it is every where good anckoring, shold Water and cleane ground.

Before the mouth of this haven lie 3 little Iland, behind them is also good road.

Two leagues or two leagues and a half to the Southwards of Waronia lieth a Gabriele, a tyde haven, which falleth dry within, so that men may goe over there dry at low water, it floweth there twelve foot up and downe, a Southsouthwest moone maketh high Water on this Coaft.

Gabriele.

In the mouth of this haven lie 3 Ilands, two on the North-side (which are the lowest) and one in the South side, that is the highest, you must runne neereft the Southermost when as you will saile in there: being come within the Ilands, you must edge up to the northwards behinde the 2 northermost Ilands, and anckor there on the north side of the haven, there it is seven and eight fathom deepe cleane ground.

Daelna
Silenfi.

About a league to the southwards of it lieth Salensi Daelna, that is to say, the farther Salensi, but betwixt them both a litle

to the northwards of Salensi, lieth yet a great indraught which lieth in at least two leagues into the land, and is about so wide as the River Tye before Amsterdam, there may lie a great multitude of shippes, it is there broad and large enough, and al over good anckorground.

A litle to the northwards of this in-draught lieth a litle the Ilands, or rock, somewhat high, about which you may saile within, to wete, through betwixt these rocks and the land, but may make no roade under them.

Salensi Daelna is a great broad Bay, before it lie 3 Ilands, which are to see to gray of colour, as the maine land.

To the northwards of these Ilands upon the point of the Bay, standeth 3 great Warders, and a litle to the Southwards of the Ilands, on the maine land, lieth a steepe hill, by which marckes this Bay is very good to be knowne.

If you will saile into this Bay, comming from the Northwards alongst the shore by the foresaid great in-draught, a litle to the Northwards of this Baye, you must looke out for these foresaid great Warders, leave them on the starboard side, and saile in close by them, through betwixt that point and the Ilands, first Westsouthwest, somewhat within, and then more Southerly, untill behinde the Ilands, and anckor there in five, six, or seven fathom: you may also saile further to the Southwards into the Baye, so deepe as you will, there it is all over cleane.

When you come before the channell, it seemeth to be very narrow, but it is broad enough.

To the southwards of these Iland is also a channell which is very narrow, but yet for need you may saile out there. The Southermost Iland, that is, whereupon the Fishermen dwel, is fast to the Northermost with a shold, whereupon is at high Water ten or eleven foot Water, but at low Water you can not goe over it.

Two litle leagues to the Southwards off Salensi lieth the Iland Daelna Olinie, that is to say, the furthest Olinie, it is an Iland almost of Fashion like Bliefna Olinie, at the North end high, at the South end lower, and upon the end very steepe, it hath in the middelt, (but somewhat neerer the Southend then the North end) a low Valley, where at high Water the Sea doth almost run alongst over it.

Behinde this Iland, not under the Iland, but under the maine land, are good roades.

For to come in from the Northwards behinde this Iland, it is a broad, large, and very deepe channell, without any dangers, but if you will saile in behinde it (from the Southwards) then you must runne in close by the Iland, for to avoide a foule and stony riffe, which lieth off from the mayne land, halfe wayes to the Iland, and so should that it falleth dry with the spring tydes at low Water.

About halfe wayes the Iland, nearest the South end, is a point, lying out from the maine land, towards the Iland, to the northwards of it men doe anckor in 6, 7, or 8 fathom.

When you come in from the northwards, you may (so soone as you come within the points) luffe up towards close about the point of the main land into a Bay, and anckor there in eight, six, five, or foure fathom, according as you saile far in, there it is very good lying. In these roades under the maine land, it is all cleane and flat rising ground, but under the Iland is deepe, and the ground rising very steepe, and therefore it is not good anckoring there.

Betwixt this Iland Daelna Olinie, and Silenfi, lie 3 little black Ilands, where is very good road under them, in eight, seven, and six fathom.

From Daelna Olinie to Rinde are five leagues. Rinde is a very faire haven, before it lie foure little Ilands, where men may goe to anckor behinde them, behinde these Ilands this Haven hath two Bayes, upon the point betwixt them both standeth a great Crosse, the southermost baye is farre the greatest, into it commeth also a river, or off-water, where men doe catch Sammon. The middlemost Iland (which is the northermost save one) is the greatest and highest upon which standeth a great Warder, the northermost is somewhat long and small, and so low, that at high water the sea runneth up a good wayes upon it on both sides, and so maketh the Iland smaller.

Betwixt that Iland and the maine land, or the north shore off the Havens mouth lieth a funcken rock, which you must leave, in comming in, on the larboard side, and runne in close by the main land, this channell is so narrow, that you can not saile it in, except you have a large winde, at low Water there remaineth no more then 9 or 10 foot deepe.

To the Southwards of that great Iland, lieth another Iland that is indifferent high, and the southermost of them all, betwixt that and the point of the maine land, lieth in the Souther

channell, which is broad and deep enough, but when you saile in there, you must run nearest the Iland, for to avoid a suncken rock which lyeth at the foresayd point of the maine land.

These channells both from the southwards and from the northwards lye in both alongst the shoares, when as that you come then within the Ilands you may anckor there all over where you wil, there it is broad and large, and every where cleane and cleare. Men doe anckor commonly under the greatest Iland thwart of the great Warder, and also behinde the northermost Iland in five, foure, or three fathom, there it is very good lying, but with a southeast winde, the sea commeth a litle rowling in, but there can goe no great sea.

Farre within the southermost bay, almost before the river, lyeth a rock, but above Water. Without the greatest and the southermost Iland, lieth also a litle Iland, or great rock, somewhat round, you may saile out and in betwixt the southermost and the greatest Iland, alongst to the northwards of that litle round Iland, that is you leave the southermost Iland with the outermost litle round Iland both on the starboard side, and the greatest Iland with the Warder on the larboard side, when you sayle out, this is a verie narrow channell, but verie cleane and cleare, so that there is a very narrow channell, but very cleane and cleare, so that there is nothing to be avoyded, but onely a litle suncken rock, which lieth at the north end of the outermost litle round Iland, and falleth dry at low water, nevertheless it is not good to use it; except it were for need that you could not doe better.

He that is bound into this haven, must run close alongst by the shoare for to get sight of the foresayd Ilands, for by reason that the innerland is high, the Ilands lye so under the land, that men can hardly see them, when they be any thing off from the shoare.

A halfe league to the southwards of Rinde is another great Bay, or haven, before it lye two litle high Ilands upon the northermost standeth a great crosse, you may sayle in there about on both sides of these litle Ilands, and also through betwixt them, and anckor where you will in fifteene, twelve, eight, or five fathom, deepe or shold, according as you sayle farre in, & lye there sheltered for all windes, but when the winde is harde out of the sea, thwart upon the shoar, there wil com in somewhat a rowling sea, but there can goe no great sea that can hurt you. A litle to the northward of this haven lyeth a low long Iland close to the shoare whereby you may also know this coast, you may sail through betwixt this foresaid Iland and the maine land without any danger.

From this haven to the Seven Iland are foure great leagues. A litle to the northwards of the end of the Seven Ilands, lieth a faire great sand bay, where is also good anckoring for southerly and southeast windes, but not for easterly winds, with a northeast or sea wind, it is bad lying there for there is no shelter for them, men doe anckor there in twentie, fifteene, or twelve fathom, according as they lye far or neare to the shore. The Russes call this Bay the Golden Bay, because the strand is of red sand.

On all these foresaid coasts a southwest and northeast moone maketh high water, like as on the former.

The Seven Ilands lye of them alongst the shore, the first or northermost is farre the greatest of all, a high Iland. The 4 northermost follow close one to the other, and lie about an English mile, or a shot of a cast peece, a litle more or lesse of the land, so that men may saile there through betwixt. The 5 is a litle round Iland, and lieth nearer to the land, there you can not runne through within it, which is fast to the land with a shold of rocks where of some lie above, and some under water. The 2 southermost lie a good wayes to the southwards off the fifth: betwixt them and the maine land you may also saile through, you may also runne through in and out betwixt these same Ilands everie where, except betwixt the second and third to then of from the northwards, betwixt them it is foule.

Betweene these Seven Ilands and the maine land, goeth a strong tyde, as well of flood, as of ebbe, where of men must be very carefull.

Betweene the northermost and the maine land is a good road (thwart of the south end of the Iland) under the maine land, there is a faire sand-bay, with an of-water, where is much Sammon to be caught, but is not there used.

A litle to the northwards of this Sand-bay lieth a litle Iland betwixt the great Iland and the coast, men doe anckor to the S. wards of that litle Iland, thwart of the sand bay in seven, six, five, or foure fathom, so should as they wil, there is a very even sandground, rising so even as if it were planed.

Over against the foresaid bay men may make road under

the south point of the Iland, thwart of a litle bay, there they bring a howser on land, & an anckor to seawards in nine tenne fathom, there they lye somewhat more out off the tyde then in the bay over against it.

Betwixt this great Iland and the Coast is about two third parts of the channel towards the main land, flat rising ground, and the other third part towards the Iland Deep, the nearer the Iland the deeper unto 18 and 19 fathom.

About halfe wayes betwixt that foresaid litle round Iland, and the north point of the greatest Iland, stand on the mayne land some litle Lappish houses, or a litle village.

Betwixt the second and third Iland, or nearest thwart of the second, to tell from the northwards, lyeth yet a litle Village, thwart of it is a bay where men may anckor in tenne or twelve fathom all cleane sand-ground, but with a southeast wind there commeth in a rowling sea, but with northerly winds it is very good lying there.

Thwart of the fourth Iland on the mayne land, is also a sand-bay, where is also good road in seven or eight fathom for northwest or north wind, but with an east winde it is there bad, lying, that bloweth there in open through betwixt the fourth and fifth Iland.

Even at the end of the seven Ilands is a great Indraght, or bay, which the Russes call the Shipper, which is narrow at the comming in, but within indifferent large and wide: within it is good road in 12, 8 and 4 fathom clean rising ground, but with a n. e. wind it is bad lying there, that bloweth there flat in.

About nine leagues to the southwards of the seven Ilands, lieth a point called Siornenos, that is to say, Black point, it is so called, because it is very black to see to, there within it the land is high, and goeth downwards low towards this point, almost as Swetenoes.

At this point the land beginneth to alter in forme to the northwards of it the coast is altogether high, but to the southwards of it all low and even land, so that thereby you may know (when you saile alongst this coast) whether you be to the northward or to the southwards of this black point.

A litle to the northward of this point lieth a high and great Iland a halfe league long, which the Russes call Noock Ostrove, which is the Nayle Iland, behinde it is very good roade, you must run in there from the southwards, from the northwards, you can not come in there behind it.

The north end is fast to the maine land with a bancke or strake of sand, which lieth most part above water, you may saile in there so far behinde it, as you will, and anckor in ten, 8, 6 or 4 fathom, the further that you saile in the shoulder it is, there it is very good lying, and sheltered for all Winds.

From the Siornenos, or the black point to Evanekrist, it is southsoutheast 4 or 5 leagues, that is a point with many crosses, under it you may make roade for southerly Winds.

From Evanekrist to Kletna are yet three or foure leagues, this is a pointe whereupon stand also many crosses, it lieth out a litle but not so much as Evanekrist, there you may have also road for southerly Winds, but not for Seawinds.

From this point to the Ilands of Swetenoes or Iockena, it is two leagues, there are 6 in number, whereof the five lie alongst the shoare about the space of two leagues, the sixth lieth within the other, thwart of the southermost of the five: The three northermost lie one by the other, as also the two southermost parted asunder from the other three the northermost off all these Ilands of Iockena lieth from the point of Swetenoes due West 3 leagues, behinde it is good roade thwart of the south end in five or six fathom. The point of Swetenoes is a flat point lying out to the Westwards off it, at the end of those foresaid Ilands, goeth in the river of Iockena, where is a great Sammon-fishing. When you are by Swetenoes you can see litle perfectnesse of these Ilands, because the maine Land is much higher then the Ilands.

He that commeth from the northwards, and is bound in to Iockena, must runne close alongst by the shoare, for to get sight of these Ilands. Through foure severall wayes you may saile through these Ilands into the river of Iockena: First comming from the northwards, you may saile alongst by the shoare, through betwixt the shoare and the Ilands, (which you leave then all on the larboard side) into the river.

The second passage lieth in through betwixt the three northermost, and the two southermost Ilands, that is a broad, wide and deepe, and also the best channel of all, it lieth S. West, and southwest and by West from the point of Swetenoes, and lieth in most south, when you saile in there, you must runne nearest the southermost Ilands, because of a suncken rock which lieth in this channel somewhat off from the third Iland, at high Water you may run over it, but not at low Water.

Being

Being come within these Ilands, you shal see the sixth Iland, which lieth within the two southermost, you must run about by it, leaving it on the larboard side; when as you are then a little past that innermost Iland; you come against the high point, and saile in alongst amidst the channell, betwixt both Ilands, there it is should water, to wit, five, foure, three, to two fathom and a halfe, but you may saile in amid the channel without feare, all alongst unto Lappishouses, where the Sammonfishing is, and ankor there also in the middest of the River, thereabouts lye some suncken rocks, which at low water are uncovered, whereof you must take heed.

For to have the right knowledge of this channell, you must looke out for to high point, which lieth at the west point off the river, within these Ilands, when that is behinde the fourth Iland (to reckon of from the northwards) and the point of Swetenoes is northeast and by east from you, then you are right open before the foresaid channell.

Betwixt the two southermost Ilands goeth also an indifferent wide channell through, where men can sayle in, and so come on against the innermost Iland, which you may sayle about on both sides.

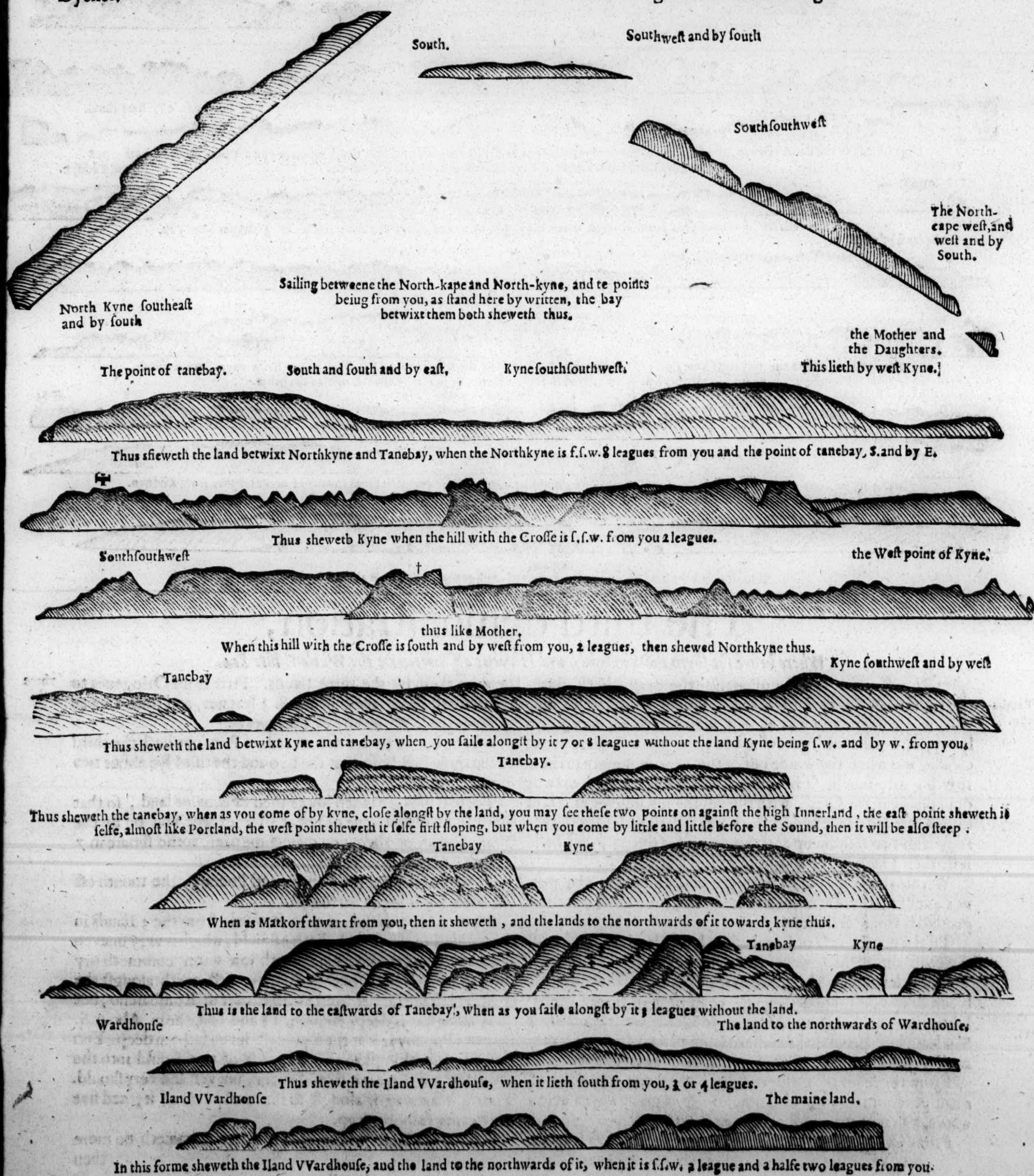
Betwixt the Ilands and the mayne land, you may also sayle through, but that is a very narrow Channel, men sayle through it, as if they sayled in alongst a ditch betwixt two Dyckes.

For need, or if it were in extremity, you might also sayle through at high water betwixt the northermost Iland, an the second and likewise also betwixt the second and third, but if you can be any means doe better, it is not good to doe it.

Men may ankor at divers places within these Ilands. Betwixt the two southermost Ilands, and the innermost Iland, you may have roade, where you lye sheltered for al winds, and safe from Ice-drifts out of the sea. Within the innermost Iland you must also ankor over against it somewhat further in against the steepe point. At the rivers mouth, on the west shoare is a bay where you may saile in, and ankor so neere to the shoare as you will, in six, five, foure, and three fathom soft sticking ground, there you lye safe from Icedrifts. You may also ankor on the east side, right before the steepe point, but there you lye not safe for ice that commeth out of the river. The tyde here alongst these Ilands, a great neere with the tyde of Swetenoes, it floweth the spring tydes neare to two fathom and a halfe up and downe.

Behind the point of Swetenoes you may run into the Bay, and ankor there for a north, northeast and east winde, there is cleane ground.

At Kilduyn an E.S.E. Moone maketh the highest water. Alongst these coasts of Lapland to the eastwards of the N. Cape, the flood commeth out of the northwest and N. N. W. and so runneth alongst the land unto Orlogenes.



The coastes betwene the North-cape and Swetenoes.



Thus sheweth the land and the Iland Wardhouse being westnorthwest from you 3 or 4 leagues.



Thus sheweth the land of Kegot or the Fishers Iland, when as you saile alongst by it 4 or 5 leagues without the land.



Thus sheweth the land or the Fishers Iland, when as you saile alongst by it comming from the westwards comming from the westwards. Kilduyn. Maine land. River of Kool.



In this forme sheweth Kilduyn, when the steepe point lieth S. and by E. and the River of Cool S. w. about 5 leagues from you, and the land to the westwards of Kilduyn is very hilly, and the river doth shew it selfe verie wide open as here standeth portrayed. the River of Cool.



Thus sheweth the Iland of Kilduyn, when the westpoint lieth southwest and by south, and the eastpoint south and by west, somewhat westerly from you, the river of Cool lieth then southwest and by west from you, the maine land that you may see to the eastwards lieth then S. E. and by S. somewhat southerly from you: the land of Laus you may then yet also see in the northwest.

Iland Kilduyn.



These three last figures belong one to the other by the Crosses.



Point of the Fishers Iland.

Thus sheweth the Iland Kilduyn, and the land to the northwards of it in the bay towards Fishers Iland, when as you are betwixt them both 7 or 8 leagues from land, Kilduyn being about south, or S. S. W. from you. Tiribiry. Iland Kilduyn.



Thus sheweth the land eastwards from Kilduyn, when the south, or E. end of Kilduyn is w. and by N. 3 leagues from you. The land of Tiribiry.



The Iland Kilduyn.



The Iland of Kilduyn and Tiribiry shew thus, when as you saile alongst by them 4 leagues from land, about halfe wayes betwixt both, nearest to Tiribiry, as is portrayed in the 2 figures here above, the AA one to the other. The land of Tiribiry.



The Iland Kilduyn.



In this forme sheweth the land of Tiribiry, when you saile alongst by it, being 4 or 5 leagues from it, and 11 or 12 leagues from Kilduyn. Swetenoes. Third point. Secoud point. First point. Swetenoes.



Seonce.

Thus sheweth the land betwixt Swetenoes and Orlogenes, as you saile alongst by it.

The third demonstration,

Where in are set forth the Seacoasts and Havens off Swetenoes the Whole White Sea.

Lambascho.

From Swetenoes to Lambascho, the coast lieth south-east thirteene leagues. Under Lambascho men may also goe to anchor, but it is not there very good lying, especially with great shippes; the ground there is not cleane, and when the winde out of the Sea, commeth in there rowling very much. The lying of this roade standeth drawne out at large in the Card, with the depths set downe as it is at high water and neepe tydes: the water falleth and floweth there at least two fathom up and downe, and at spring-tydes little lesse then 3 fathom, or 2 fathom and an half.

Within the point, or in the bight of Lambascho you may not anchor, there remaineth not above 3 foot water, and the ground is stonie and foule.

To the northwards of Lambascho lye 5 Ilands lying alongst the coast almost halfe wayes to Swetenoes.

Thre leagues to the southwards of Lambascho, lieth a black steep point, untill there the coast lieth of from Lambascho also S. S. E. but from that point to Orlogenes, the course is S. 9 leagues, betwixt them there is no place where men may anchor, but all alongst a Whole coast, cleane and steepe.

Orlogenes.

From the point off Orlogenes lieth of a stone-riffe a shot off a cast peece into Sea, which falleth dry a great wayes at low water, whereof men must take very good heed.

From Orlogenes to the river of Ponnoye, it is five leagues:

betwixt them lye the three Ilands. First from Orlogenes to the two first Ilands, the course is S. 3 leagues, and from thence to Ponnoye S. W. and by S. 3 leagues.

A halfe league to the northwards of Ponnoye lieth the third of the three Ilands, so that the two and the third lye about two leagues asunder.

These Ilands are much lower then the maine land, so that they can hardly be seene or not at all, except you be by the shoare, thwart of them you may come neare to the shoare in 7 fathom without danger.

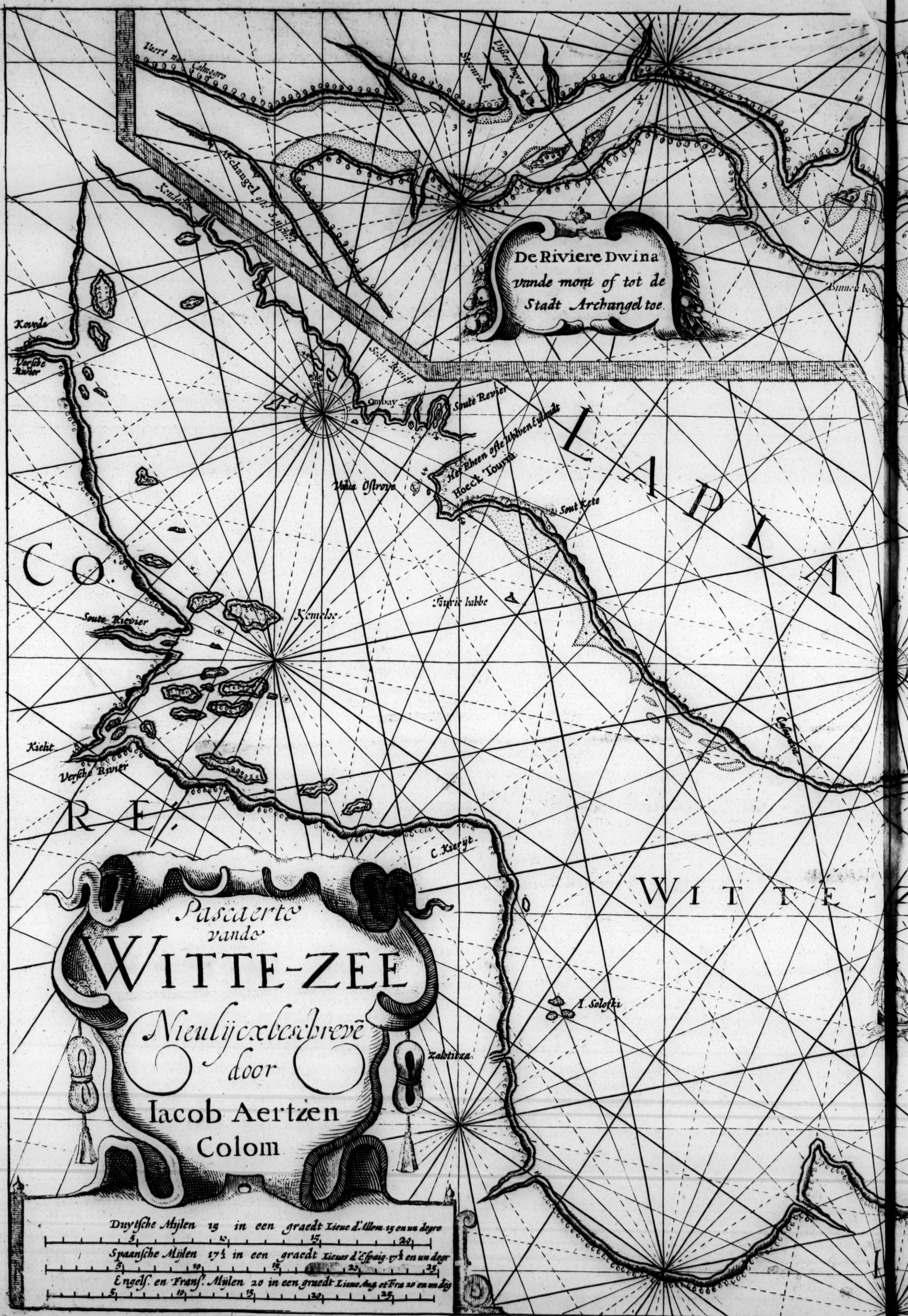
Thwart of these three Ilands, and Ponnoye, the mouth off the white sea is at the narrowest.

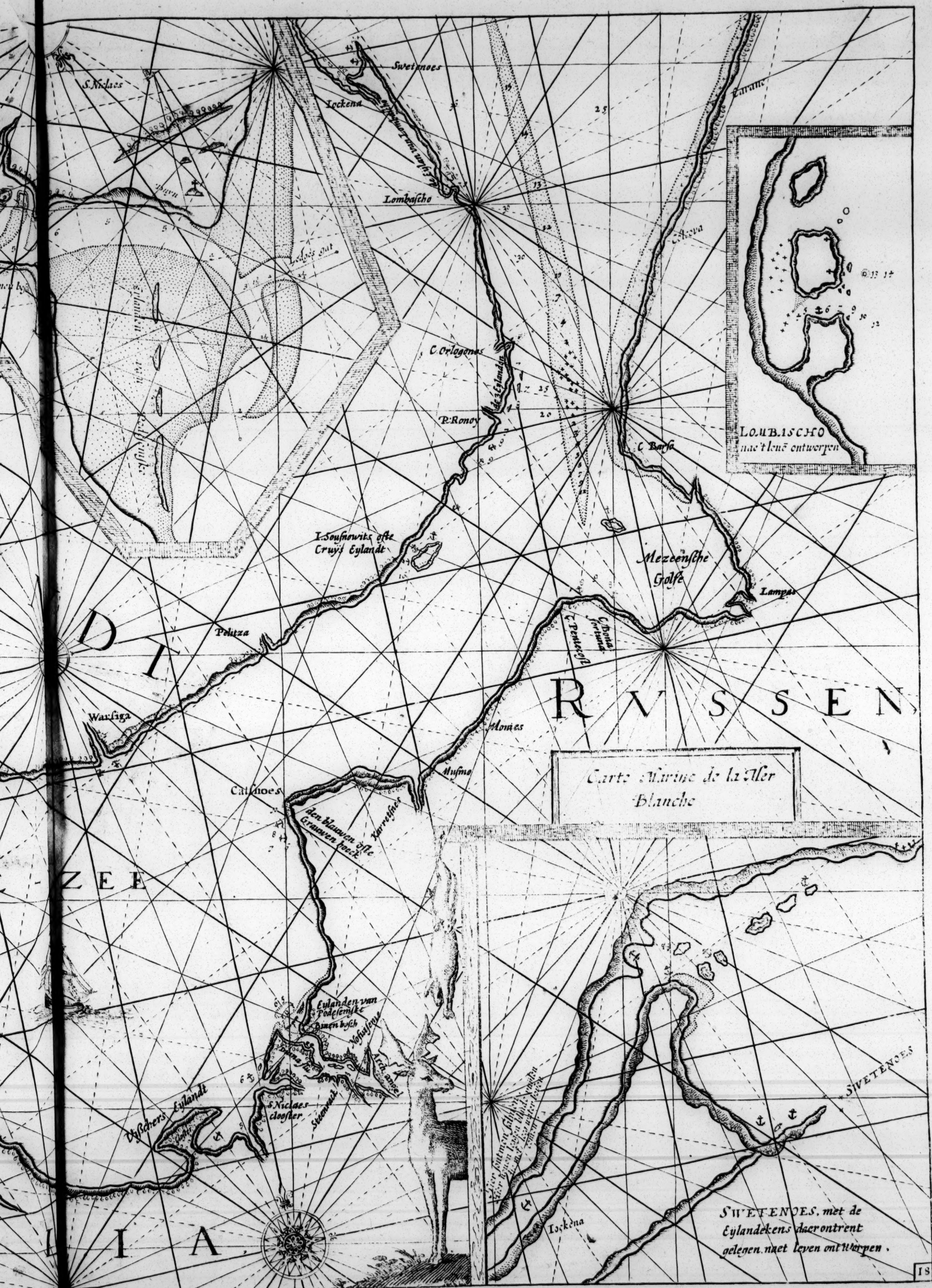
About 4 leagues thwart of to seawards from the 3 Ilands in the middest of the mouth, lieth a should, which is very uneven and stony, and at some places with low water commeth dry above water, it lieth south and north, first north alongst the coast, at last northnorthwest untill thwart of Lambascho, but there alongst it is deepe enough, 15 and 16 fathom. About S. E. from Ponnoye it is at the shouldest seven fathom deep. You may also saile alongst to the eastwards of this should into the white sea, but there it is should water, uneven and very should. The right fareway is alongst to the westwards of it, and five and twenty fathom deep.

Ponnoye is a Riacer where at low water remaineth no more then



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then ten foot water, it floweth there with a spring-tyde 3 fathom up and downe, and with an ordinary tyde 15 foot.

From the three Ilands to the Iland Soufnowits: when men doe call the crosse Iland, the course is f. w. and by f. or as some doe hold f. w. 10 leagues, or from Ponnoy 9 leagues. Al alongft this coast men may anchor every where in 8 or 9 fathom, and with contrary winds stop the tydes, there goe strong tydes (especially in the spring) off the yeare of an Eb. Between the 3 Ilands and the crosse Iland lieth a point, upon which Iland also 3 cresses, one by the other, which me doe mistaken oftentimes for the crosse-iland, but it is much smaller to see to. When you doe get sight of that point, there sheweth by it, as if there lay a shippe before the land with the topmast stricke. The right crosse Iland hath upon the north end 2 cresses, and upon the South end three, by al these markes they are good to be knowne one from the other.

Current in the mouth of the white sea.

Behinde the Crosse-Iland you may have road in 6 or 7 fathom, you may sail in behind it, as wel from the n. wards as from the south wards, it is there cleane & cleare every where, men doe anchor, that the great crosse doe stand from them e. n. e. there is the right road.

Southeast and by south from the 3 Ilands, and Pannoy on the Ruffe side, there goeth in the Meseens golfe, into which commeth a great river, where men may go up to Kilda, and Kolmogro, and also another, upon which the town Slowoda lieth.

S. E. from Ponnoy lieth a litle Iland in the mouth of the Meseens golf, where you may have road under for westerly and S. w. winds.

The S. point of this golf is a low sandstrand, al grown with trees, there you may also anchor alongft by the shore, but close by the land; if you lye somewhat of from the shore in 9 fathom, there the ground is foule, from thence alongft the shoare to the blew point, it is all a faire strand.

From the crosse-iland to the blew or gray point, the course is f. w. 20 leag. In this fareway in the mouth of the white sea, there goe sometimes very strong currents, especially in the spring, throug the terrible great fustuts, of the melting of the snow, which faller from both lids into the white-sea, & runneth through this strait into the sea, with great whirling and terrible riplings: It happeneth somtims that the current runneth there so terrible strong, to the w. wards in to the sea, that with a reasonable gale and full sayls, men can doe no more but item the tyde, whereof men must be mindful.

Gray point.

Under the gray point men may anchor on the southside, in ten, eight, or seven fathom, there it is good lying for easterly winds, a northeast winde commeth from the point the ground is there reasonable good, but not the cleaneft.

From the gray point e. wards to the Meseens golf the coast is all faire sandstrand, with some bancks of 2 fathom and an halfe, and 3 fathom alongft the shoare, not farre without the land, where sometimes the current falleth over, with great riplings.

From the blew point to the river of Arch-Angel, the course is S. & by w. 13 leag. When as you saile so towards the rivers, you shall then first espy the land a good wayes to the w. wardsof S. Nicolas, it arriveth in a long strake, & then there riseth more land towards the rivers, as if it were a round Iland, afterwards you shall see the steeple of S. Nicolas, when that standeth f. & by w. & f. f. w. from you, then you are open before the mouth of the river of Arch-Angel.

For to sail into the river off Arch-angel.

If you wil saile in there, then bring the steeple of S. Nicolas a ships length and a halfe, or 2 ships lengt to the E. wards of the crosse sandhil, keepe them so standing and saile right with them, untill that the wood within come midwayes in the middlemost Podesfemske, goe on then f. w. & by f. & f. w. for to sail a weather of the tail or should, which shooteth of from the east shoare, when as then the wood within (that is the wood upon the n. e. point of the river) cometh to the southeamost of the 2 woods, which stand upon the middlemost Iland or the Podesfemske, then you are in the mouth of the channel, right upon the shouldest of the bat, the markes of the taile are, when the wood cometh halfe waies betwixt the southermost & the middlemost Podesfemske, when the point of the southermost Podesfemske is f. f. e. somewhat southerly from you, then you are without the point of the w. grounds. If you bring that point no more easterly from you, you can take no hurt of that point. When you are entred the channel, then goe, as is before said f. w. & by f. and f. w. untill that the steeple of S. Nicolas come a ships length by w. the Crosse sandhil, then further take the sounding of the w. shoare, & run in by it, towards the footstrand, & alongft close by it, without going of from it, untill that you come thwart of the white place, or spot, on the w. shoare, about the place where it standeth marked in the Card with A. Edge over then from thence e. & by f., & e. f. e. right to the point of the wood on the e. shoare, add on f. e. in alongft by the east land, close alongft by the shoare, but thwart of the 2 Ilands which lye on the starboard side, it is a good wayes alongft the e. shoare somewhat foule and should, whereof you must take heed, but go alongft by the e. shoare, untill that you come by the first river on the larboard side, edge then again to the w. shoar alongft f. f. w. untill you com to the bight, there it is shold water on the east side.

When you are come in the bight, then goe on E. S. east, and afterwards east and by S. towards the Stonersach, sail through there

amidst the channel, alongft by the buyes, which lye in the middest of the deepe, it is on both sides of the buyes uneven and rugged.

When as you come against the stone-reach there standeth a Fishers-house upon the w. shoare, by the litle River that runneth into the land, at the northend, or W. end of the stone-reach, thwart off that foresaid house lyeth a great stone under water, which you may saile about on both sides, it lieth about the middest of the fareway, as you come sailing on, men saile commonly about to the w. wards of it, all alongft by the west shoare, like as also through the stone-reach, for the west side is deepe enough, and at some places somewhat soft ground, but the east shoare is full of rocks.

When as you are past the buyes, then you must keepe of againe, somewhat from the shore. There was wont to lye a litle Iland at the end of the stone-reach, but that is of late yeares altogether skoured away with the Ice. When as you are now through the stone-reach, the course is first S. E. and afterwards f. e. and by f. untill you come in the bight, then goe on e. f. e. and keepe yet to the w. shoare, untill that you see the towne of Arch-Angel, then saile right towards it, but avoid the point on the larboard side, for it is foule.

Arch-angel.

For to goe from Arch-Angel further up the river to Kolmogro it is about 12 or 13 leagues most southeast, but the River runneth upwards with many crooked bights.

Kolmogro.

For to saile out of the river of Arch-Angel, then run out by the footstrand, and keepe the sounding of the w. shoare. When as you begin to see the steeple of S. Nicolas then bring it a ships length to the second or middlemost Podesfemske, there lieth a black hommock upon the strand. The N. side of the wood within, cometh then over that hommock, then goe on the N. E. and by N. and N. N. E., towards the Podesfemskes. When as then the wood within cometh to the N. side of the southermost of the two woods, upon the middlemost Podesfemske, then you are upon the shouldest off the baare, but when the point of the southermost Podesfemske is S. S. E. somewhat southerly from you, then you are at the end of all the shouldest, and may goe your course through the Sea, where you please, no shouldest shall hinder you.

For to sail out of the River.

From the Barre of Podesfemske, or from the river of Arch-Angel to the roade of S. Nicolas it is 4 leag. There standeth a beacon colas at the end of the Iland, where the English house standeth upon, by w. that beacons is the roade for the English ships, in 6 or 7 fathom, according as they lye neare or far from the shoare. The English River lieth in there E. N. E., and N. E. and by East, alongft by the Cloyster of S. Nicolas, but that is so shold a river that no ships can goe into it, men must lade them without with Lodges.

English River.

About f. w. & w. & by w. from the barre of the river of Arch-Angel lieth the Salt Iland, upon it standeth a Cloyster, & is fast to the main land. This Iad lieth of from thence to the C. Onega w. & by n.

From Crosse-Iland to Warfiga, the course is W. S. W. and W. & warfiga by S. about 24 leagues. Warfiga is a village, lying on a river, where is a Sammon-fishing, which lieth into the northwards within the land, you can not come into the river with shippes, there is no more then 8 or 9 foot water, but must stay without in the roade before the river, there is cleane sand-ground, without any foule ground, so that you may anchor there without danger, so neare or farre from the shoare as you will.

This river men doe know (when they saile alongft the coast) by 3 high hommocks, which are higher then all the other, and almost of fashion like the 3 hills by Bayonne in Galicia, to the N. wards of it are white sand-hills with trees upon them. Even by west the 3 foresaid hommocks goeth in the river.

For to saile from Warfiga to Ombay, the course is alongft by the coast a litle west, w. and by n. and then w. n. w. afterwards the most N. W., unto the point of Tauria 36 or 37 leagues. About halfe wayes betwixt them, well so neare Warfiga as Tauria lieth on the coast a high barre hill, thwart of it and to the westwards of it lye some bancks, whereof you must take heed.

The point of Tauria is a high steepe point full of trees, to the e. wards of this land, the point falleth away into a great Baye farre alongft to the e. wards. About 5 leagues to the e. wards of the point of Tauria, lieth a rock, a good wayes from land, with is not very great, but very good to be knowne, it sheweth a farre of, as if there fate a great Ape upon it, this rock the Russes call Tourie Babbe that is to say, Grand-mother of the point.

Point off Tauria.

Tourie Babbe.

Within that rock in that foresaid baye it is all shoulde water, uneven and foule ground, where you may not anchor not have roade, but to the eastwards of the point Tauria you may anchor for westerly and northealy windes, somewhat to the northwards of the point in the bight, there it is shold, but by the point it is deepe, there you must anchor close by the land.

By the w. point lieth the Iland Volna Ostrove, by the Dutchmen called the Reeme Iland. From the point Tauria to that Iland, the course is N. N. W. 2 leagues.

Volna Ostrove.

Betwixt the Iland and the land of Tauria lieth also a litle Iland, betwixt these 2 Ilands, you may (for need) saile through with a ship, but it is very narrow, at the n. e. point of Ostrove is roade in 30 fathom, then you lie with the ship, (when he lie wended to the Iland)

in eight fathome, so very steepe and rising is the ground there.

From Volna, Ostrove, or the Reeme Island to the Gouda (that is the Salt river where men doe lade, lying a half league by E. Ombay, the course is n. n. e. three leagues which lieth in north, and N. and by E., it is not very broad but deepe, at the coming in it is in the middest 24, and 25 fathom, farre within, 5 or 6 fathom deepe, but there it is foule. Men doe commonly anckor a half league within the river on the east side, with an anckor in the middest off the river in sixteen or eightene fathom, and with a cable on land, there it is good lying with al windes, except with a south S. West winde, which bloweth there open in.

About halfe a league to the westwards of it lieth the fresh river of Ombay, which is so should and foule, that men can not goe in there with shippes, except they be small, and also the Russes are not willing they should come there, for not to spoyle their Sammon-fishing, there is great store off Sammon caught, which is carried from thence with boats to the ships in the Salt-river.

From thence the coast lieth somewhat alongst westsouthwest and then upon northwest to Kandalex.

Thereabouts lye also more ladeplaces, where Sammon is caught, as Kierickarick, and Cargapoll, that lieth southwest from Ombay, on the Koreels side.

The C. of Candenoës & Orlogenoës lie n.e. & s.w. 47 leag. asunder. The point of Candenoës is very good to be known, there stand 5 great crosses upon it for markes. When as you fall with it, you may very well perceive, that the land falleth away, on the one side to the s.w., towards the white sea, and s.e. on the other side. About 13 leag. to the e. wards of the G. de Candenoës lieth an Island, called Morfonowits, to the e. wards of it goeth a great baye into the land, but it is very shoule waters, with many shoules & dwalegrounds. It hath heretofore happened, that some ships have bene here lost, thinking that they run into the mouth of the white sea, for it agreeth very neare with the course, & also with the height of the white sea, but it is good to know by the land, and to discern one from the other, for the Russe coast to the eastwards of Candenoës is altogether a land with Sandhills, and a flat strand, but the coast of Lapland is high and hilly. In this bay goeth a river through the land, where you can com through with Lodges into the white sea.

Thwart of this baye, about 26 leagues E., and E. and by S. from Candenoës lieth the Island of Calgoya, being 13 leagues long, you may saile round about it, but upon the S. side runneth a great riffe alongst the land: they that com from the eastwards must avoid it, for it is fait to the W. end off the land. Upon this land are great store of Geese, which in the Sommer are altogether bare, or naked, without any feathers, which sit and brood upon one egge, which they have lying under them, and so doe hatch their young one, which are there in such abundance, that the Russes doe come there a shoare with their Lodges, and lay a deece or boarde upon the land, & drive the Geese wit itaves, into their boats or lodges, in such abundance, that they salt then into Barrells, in great abundance.

From Candenoës to the Island Tuffara, it is eastsoutheast 42 leagues betwixt them both goeth in the foresaid baye. By West well Tuffara lieth the point of Swelgenoës.

From Tuffara to the river of Colcova, the course is east 7 leagues, which is a good river, being twelve foot deepe, but there is no other trade, but that the Russes doe come there from Colmogro and S. Nicolas with Lodges, for to trade there, and to barrer their wares the for Skins and other wares.

Seven leagues to the eastwards of the river of Colcova, lieth the river of Pitfana, there is but 6 foot water, & is an unknowne place, but a litle to the w. wards of it lieth a should, which you must avoid: Oliver Bruneel in his voiage from nova zēbla com on ground ther.

About 13 leagues to the e. wards of Pitfana lieth the river of Pitfara, which lieth in s.e. by the e. point, and hath 12 foot water, the land is there low with sand-hills, and upon the west side standeth a Pack-house with some crosses. When you come within the river, you must edge up w. wards towards the Pack-house, and anckor there in 3, or 4 fathom, there is a great Haff, or broad water. You must avoid the E. side of the river, which is full of sands and banks. The litle towne of Pitfara lieth about 35 leagues within the land, there is great abundance of costly Skinues and Christall.

Betwixt Pitfara and Waygats lieth Oltgyn, and without the land lye 2 rocks or litle Islands, the one called Orangien, and the other Grave Maurice, you may anckor under them in 6 or 7 fathom. From the southermost shooteth off a litle riffe, but you may found it wel. in 3 fathom.

To the eastwards and to the westwards of the two litle Islands is a great bay, where it is should water, the land runneth there round to the point of Pitfara, al alongst in a bay of from Pitfara unto the W. waygats. It is from Pitfara to Waygats n. e. and by e. 32 leagues.

Waygats, which is also called the Straite of Nassawe is a Straite, where men may saile through into the Tartarish sea, it lieth in first about e afterwards n.e. through about 8 or 9 leag. about halfe wayes through lieth an Island, which you may saile about on both side.

A litle within the point, on the n. side is a faire bay, which you may

saile into so deepe as you will, in 5, 4, and 3 fathom, good sticking ground, alongst by the east shoare is the deepest water, there you shall lye sheltered for all winds and ice drifts.

Through this narrow or strait, hath bene divers times attempted, or undertaken, for to discover, and to finde a way, for to passe alongst to the n. wards of Tartaria, unto the right Kingdomes off Cathay and China, and so fort to the Molucques, but in vaine because of the terrible ice that remaineth there the whole yeare through, and can never melt, by reason of the continuall cold.

From the e. end of the strait waygats to baye of Oby it is e. s. e. Oby, and s. e. and by e. 40 leag. To the e. wards of it that land lieth forth northeast forty leagues more, to the two norther rivers, and then yet so forth alongst northeast but how far is yet unknowe.

The w. cast of Nova Zembla lieth to the n. wards of from Waygats to Costintiarck n. w. about 53 leagues. To the n. wards of it the land falleth away, about north and by east to the point of Langesnes, or the States point, further N. N. E., N. E. and east northeast to the Island of Orangien, the northermost part off Nava Zembla, in the height of 77 degrees and an halfe.

Of the tydes and Courses of the streames, about these foresayd places.

At the North cape a south west moone maketh high water.
Thwart of the Tanebay a south west moon maketh high water.
At wardhouse a south west moone maketh high water.
At Kilduyn an eastsoutheast moon maketh the highest water.
At Seven Islands a southeast moon maketh high water.
At Swetenoës a south and north moon maketh high water.
Alongst the coastes to the eastwards of the north cape the floods come out of the n. w. and n. n. w. and rust so alongst the coastes of Lapland, unto Orlogeneffe.
At the 3 Islands a south west and north east moone maketh high water.
At Katinofe point an east and west moon maketh the highest water.
Before Podessemake and S. Nicolas an east and by south and west and by north moon maketh the highest water.

At the Island of Nova Zembla a southeast moone maketh high water.
From Orlogenes and the 3 Island, the flood faller into the mouth of the white sea, towards the graye pointe of Catnife about s. s. w. and s. w. and by w.
But about the point of Catnife, the flood falleth into the white sea, partly towards VVarfiga and Ombay, and also towards the Podessemake and S. Nicolas.
To the eastwards of Candenoës, towards the Island of Colgoyen, the flood falleth east and by south, as also alongst the same land, and from Colgoyen towards the waygats, the tyde falleth east and west. Alongst Nova Zembla, the tydes turne about with the moone alongst Russland they come out of the west and westnorthwest, betwixt Candenoës and Pitfara, and fall so alongst Russland.

The floods towards waygats come from Colgoyen and Nova Zembla, and fall together east and by north through the Straits of waygats towards the River of Oby, so that the ebs and floods doe keep open the channel of waygats, that they are oftentimes, without ice, or at least but with ice that drives in schooles.

But to the eastwards of the waygats, the flood come out of the northeast, and fall so into the Oby, and into the Strait of Nassaw, there the water riseth and falleth, but keepeth no certaine tyde.

Of the Depths and grounds both the E. wards & W. wards of Waygats.

At the coastes alongst of from Candenoës unto waygats, men doe finde a flat rising ground, the moit part sand & soft ground, he that must sail there in misty weather, must know that in 8, or 9 fathom depth, he is 4 or 5 leagues from the coast, but when it is 30, 35, or 40 fathom, then he is farre enough from the land. So it is also alongst Nova Zembla, and also over the east side of waygats, but when you come before the Strait, it will be shoulder by litle and litle.

How these lands doe lye one from the other, and from other lands.

From the North cape to the Northkyne, east and by south	13 leagues
From the Northk. to the Tanebay E. S. E.	10 leagues
From the Tanebay or Markoff to wardhouse, southeast and by east, southeast and southeast and by south	16 leagues
From wardhouse to the point of kegor s. e. and s. e. and by S.	10 leagues
From kegor to Laus southeast and by south easterlye,	9 or 10 leagues
From Laus to the River of kool south and by east, and southsoutheast	10 leagues
From Laus to kilduyn, southeast and by south easterly	10 leagues
From kilduyn to the point of Terebirry southeast and by east	5 leagues
From the point of Terebirry to the seven Islands, s. e. and by east	13 leagues
From Terebirry to Swetenoës, the coast lieth southeast and by south	40 leagues
From Swetenoës until 3 leagues past Lombafcho southeast	16 leagues
From thence to Orlogenes south	9 leagues
From Orlogenes to the 3 Islands south	3 leagues
From the 3 Islands to Ponnoy, southwest and by south	3 leagues
From the 3 Islands to the Crosse-land Soufnowits s. w.	10 leagues
From the Crosse-land to Catnife, or the gray point southwest	10 leagues
From the Gray point to the River of Arch-angel south and by w.	13 leagues
From the Barre of Arch-angel to the Salt-land s. w. somewhat westerly	7 leagues
From the Salt-land to the C. Omega w. and w. and by N.	17 or 18 leagues
From the C. Omega to the islands Solofsky N. w. and by w.	20 leagues
From the Crosse-land to warfiga w. s. w. and w. and by s.	24 leagues
From warfiga unto the point of Lauria w. w. & by n. w. n. w. & n. w.	37 leag.
From the point of Lauria to Volna Ostrove, N. N. w.	2 leagues
From Volno Ostrove to the Gouda to the eastwards of Ombay N. N. E.	3 leagues
From Ombay to kandalex N. w. and by w.	13 leagues
From Orlogenes to the cape de Candenoës, the course is N. E.	47 leagues
From Candenoës to the Island kolgoye east and by south	16 leag.
From Candenoës to Swelgenoës s. e. and by e.	29 leagues
From Candenoës to the Island Morfonowits S. E.	13 leagues
From Candenoës to Tuffara it is E. S. E.	7 leagues
From Colcova to Pitfana E. and by N.	7 leagues
From Pitfana to Pitfara E. and E. and by N.	13 leagues
From Pitfara to VVaygats, the course is about N. E. and by E.	14 or 16 leag.
From Catnife to the islands of Solofsky w. or somewhat more southerly	37 leagues
From Catnife to VVarfiga N. w. and by w.	16 or 17 leagues
From Catnife to P. longi N. w. and by N.	23 leagues
From the Islands of Solofsky to Ombay in Lapland north	31 or 33 leagues
From Solofsky to VVarfiga E. N. E.	32 leagues
From Solofsky to Polongt N. E. and by E.	50 leagues
From Candenoës to Costintiarck in Nova Zembla N. E. and by E. about	60 leagues
From the east end of Colgoyen to VVaygats E.	60 leagues
From Pitfara to the east end of Colgoyen w. N. w.	43 leagues

Heights.

The Island kilduyn lieth in 69 degr. and forty minut. The point of Catnife or the Graye point lieth in 65 degr. S. Nicolas or the River of Arch-Angel in 65 degr. 30 minut. The Island of Solofsky in 65 degr. Ombay in 66 degr. 45 minut. Cape Candenoës 69 degr. 30 minut. The Island Colgoya in 69 degr. 10 minut. The River of Colgoya Pitfana, and Pitfara lye in 68 degr. 30 minut. VVaygats or the Straite of Nassaw lieth in 69 degr. 43 minutes.

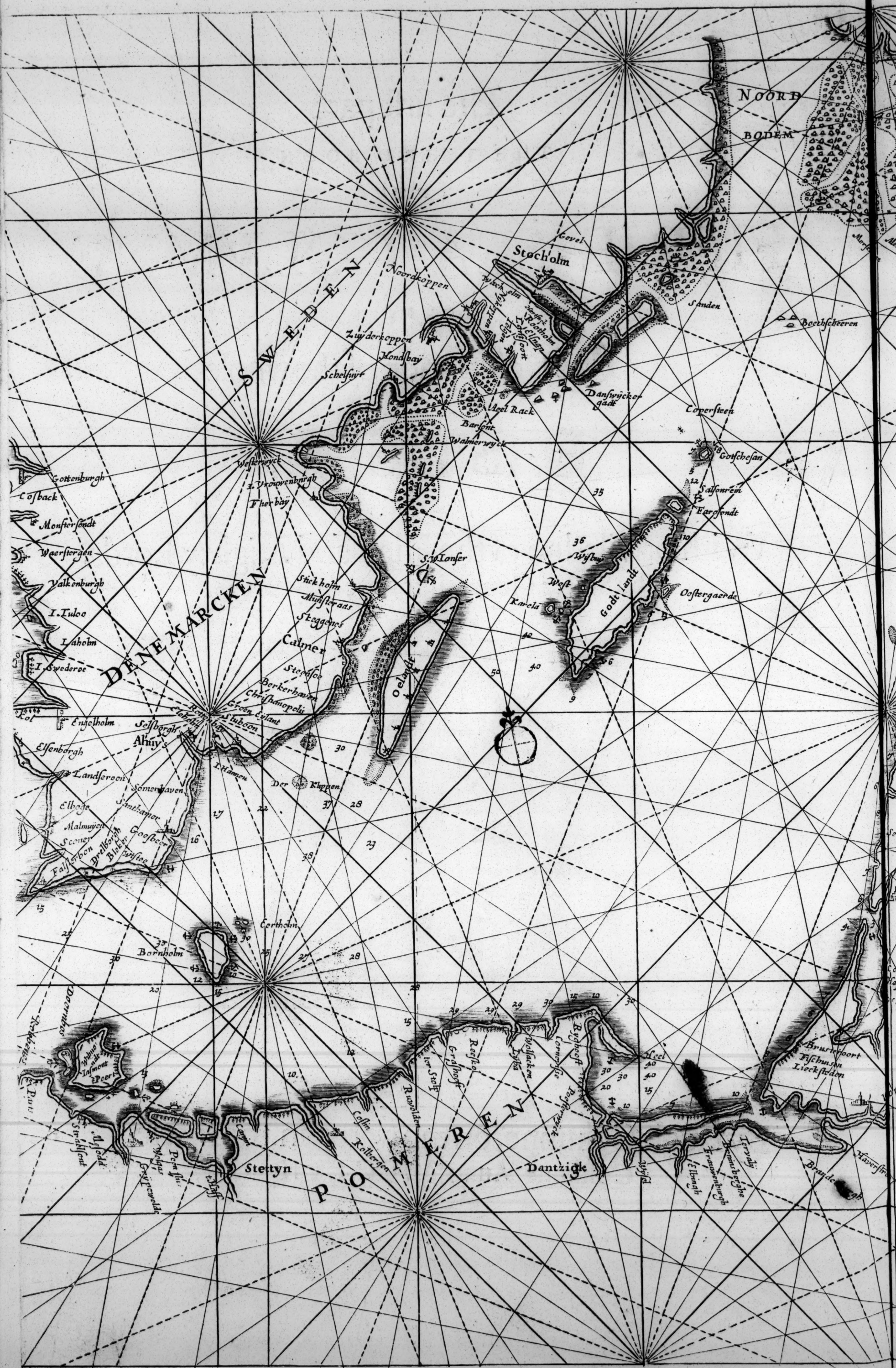
Oby.
Nova
Zem-
bla.

The first part
THE THIRD BOOK
OF THE
FIERIE-SEA-COLVMNE,
WHEREIN
The Description of the whole
EAST-SEA.

VVith priviledge of the High and Mighty Lords,
the States Generall, for twelve yeares.



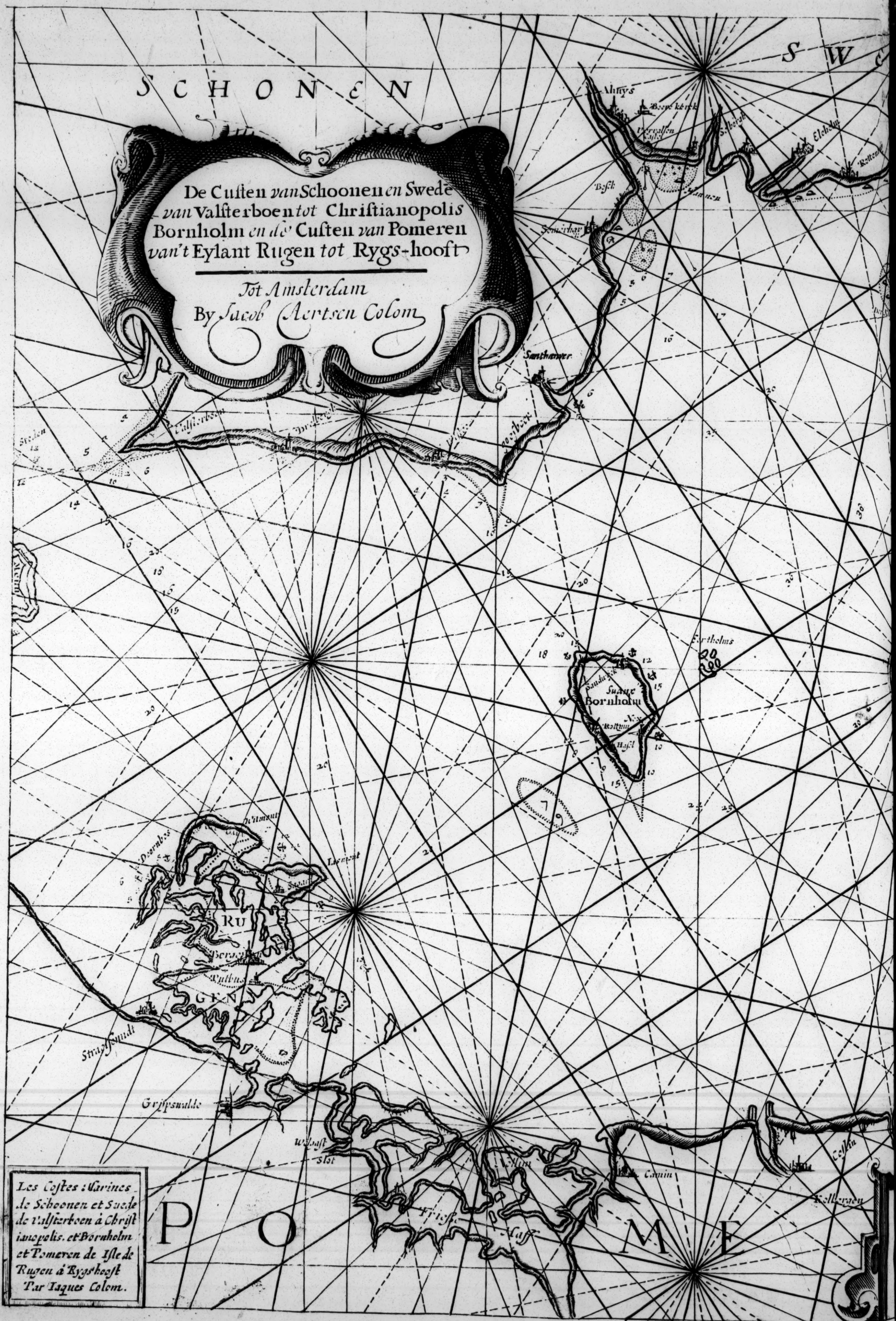
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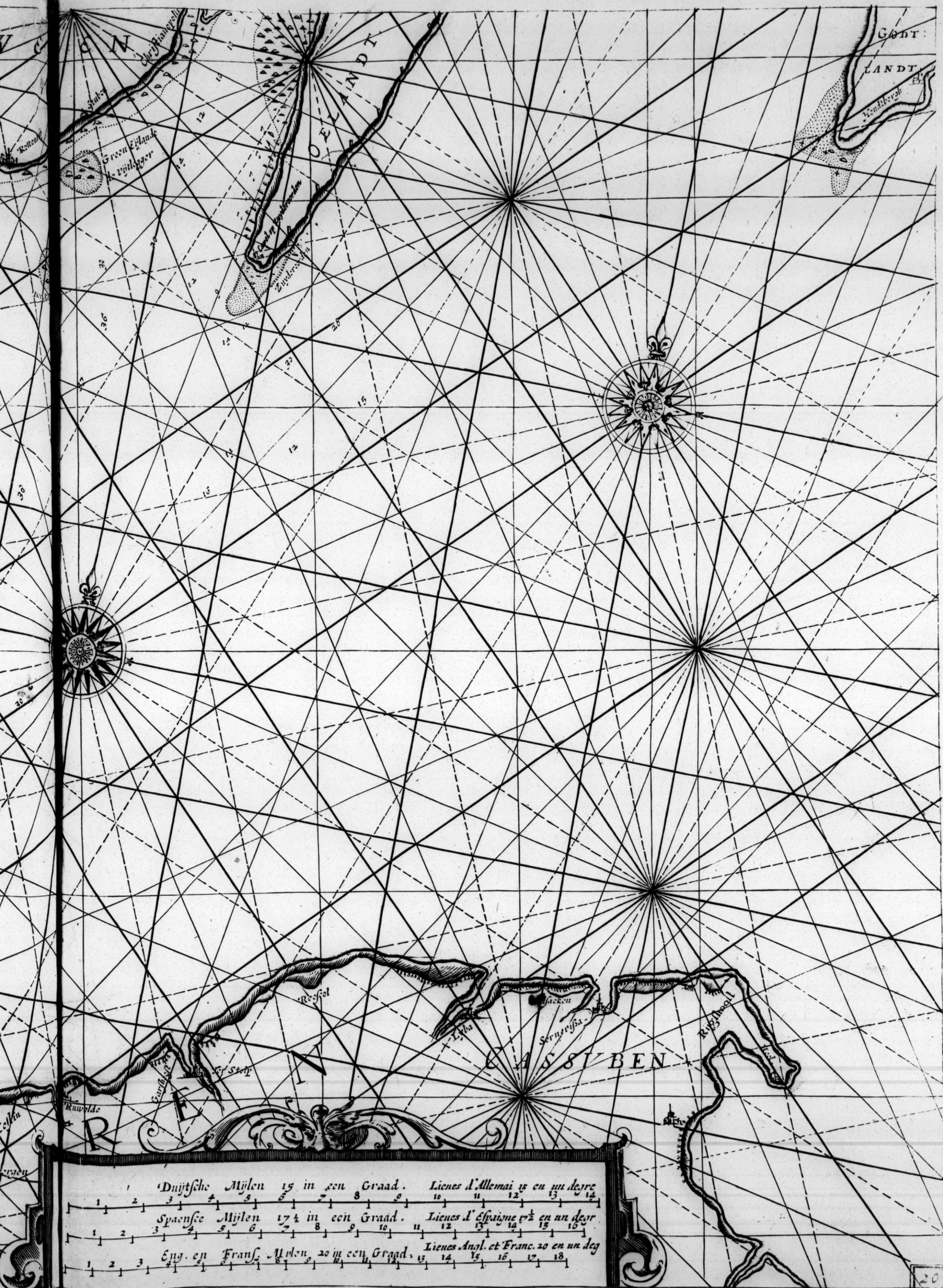


PASCAERTE
VANDE
OOST-ZEE
NIEULIX WTGEDEVEN
Door
Iacob Colom.

Duysche mylen 15 in een graedt Lieues d'Allemagne 15 en un degre
Spaensche mylen 17 1/2 in een graedt Lieues d'Espagne 17 1/2 en un degre
Engel en Fr. mylen 20 in een graedt Lieues Angl et Fra. 20 en un degre



Les Costes & Carines
de Schoonen et Swede
de Valsterboen à Christ
ianopolis. et Bornholm
et Pomeran de Isle de
Rugen à Rygsheest
Par Jaques Colom.



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The third part of the Firie Columnne,
THE THIRD BOOKE,
Of the
EASTHERN and NORTHERN NAVIGATION
Containg
The description off the Whole East Sea.

The first demonstration.

*Where in are described the Sea-coastes off Valsterboen to Christianopolis, and from
the Iland Rugen to Ryghs-head.*



Elburgh.

Our men shal saile about the riffe of Easterborn hath been here before rehearsed. The Coast from Easterborn Eastwards lieth most East and by North, somewhat Northerly. First from Easterborn to Elburgh are 3 leagues. If you will anchor before Elburgh, then bring the Cloyster and the Church within a fathom or a fathom and a half near one to the other, and saile so right in unto the town, you may anchor by it in 4, 3, or 2 fathom and a halfe.

Wtsee.

From Elburgh to Wtsee are seven or eight leagues. Betwixt them both about three leagues to the eastwards off Elburgh, and five leagues to the westwardes of Wtsee is a point off from which lieth a shoulde, come no nearer it then eight or nine fathom. Wtsee lieth in a bight, and hath a high sharp steeple. If you bound there, then bring the steeple north from you, and then sayle in right with it towards the strand; there standeth a red tiled house to the eastwards of the bridge, bring that house and the end or the bridge one in the other, and saile in so, and runne to the westwardes of the bridge, and anchor there in 3 fathome, or two foot lesse, there is cleane sand ground. When you come from the west, and are past that foresaid shoulde, then you may bodly runne alongst by the shoare in 3 fathom and a half, without feare.

Goesbeer.

Three leagues to the eastwards of Wtsee lieth a high point called Goessebeer, from thence to the Sandhammer is a leag.

Sandhammer.

From the point of Goessebeer runneth off a great shoulde farre to the seawardes, and lieth alongst the coast, unto neare Sandhammer, you may found it in 6, 8, and 10 fathom, as you will. When you runne over it in tenne fathom, then lieth the north-end of Bruntholm about east from you, and the point of Sandhammer northnorthwest. Under the Sandhammer is good anchoring for a west, westsouthwest westnorthwest, and northwest winde, in 5 or 6 fathome. When you come out of the northeast, you may runne along by this Coast, with a northwest winde, in 7, 8, 9, or 12 fathom, untill past Goessebeer, for to avoid Bruntholm.

The point of Goesbeer and the north end of Bruntholm lye northwest and by west and southeast and by east about 5 leagues asunder, but Wtsee and the foresaid north end of Bruntholm northwest and southeast 8 leagues asunder.

For to saile from Easterborne about to the northwards off Bruntholme you must go on east, so long untill that you have the length off Wtsee, then forth east and by north, and then you shall saile yet near enough to the pointe and shoulde off Goesbeer, come no nearer it then seven or eight fathom. But to saile from Easterborn to the southwards of Bruntholm, the course is east and by south, two and twentie or three and twentie leagues, and alongst the southside off Bruntholme East-southeast.

Brontholm.

The Iland Brontholm is clean round about, except on the southeast point, there runneth off a foule riffe, called Brewers rif, which men must avoyde. On the northeast side you may runne alongst by it upon your lead, without doing amisse, in 12 or 13 fathom, and alongst the southwest side in 8 or 9 fathom.

Road under Brontholm. Rottum.

Men may anchor round aboute Brontholm, at divers places, before Rottum, & to the northwards, before the Castle, thwart of Sandtwick, Suaux and Nex.

Before the Village, betwixt Rottum, and the Castle that standeth upon the northwest point, is a good anchoring for an east or northeast winde, in 13, 14, and 15 fathom, but not verie cleane ground.

Thwart of the Castle it is good lying for an eastnortheast, east, and eastsoutheast wind in eightene and twentie, and also fourteene and fifteene fathome, sand ground, but nearer the

shoare the ground is not verie cleane, the nearer to the shoare the fouler ground.

Under the northwest pointe before Santwyck there is good sandwyck anchoring for southwest windes, and you may come neare unto that point. From the northwest point to the other pointe the shoar lieth eastsoutheast and westnorthwest.

Nex.

On the east side is good anchoring before Suaux and Nex: but before Nex it is not verie clean. By Nex runneth off a little riffe from the shoare, which is steepe on both sides: but if you come no nearer it then in tenne fathom, you can take no hurt of it: to the northwardes of Nex lieth also a great rock. He that will anchor before Nex, let him anchor so, that the flat steeple which standeth above Nex, doe stand betwixt the west and west and by south from him, and that the north pointe be north and by west, and the south point be southsouthwest from him, there it is two and twentie fathom deep, and cleane sand ground. An many other places it is otherwise stonie and rough ground, with southwest and west winds you have there a weter shoare.

The Earholmes lye from the north-end of Bruntholm east and by north and west and by south foure leagues asunder, and from the southeast end south and north five leagues. In the Earholms a little haven, but by reason that is not used it is unknown.

Betwixt the north point of Bruntholm and the pointe off Sandhammer, but nearest to Bruntholm lieth a shoulde off six fathom, where sometimes Fishermen doe lye to fish, it is not verie great, but hard stonie ground.

Shoulde off by Brontholm.

From Sandhammer the coast lyeth northeast and by north a league to Somer-haven, this a round bay, within it is very good anchor ground. From thence the coast lieth about north five league unto Ahuys. From the north point of Brontholm to Ahuys, the course is north somewhat northerly about ten leag. But to Hanno north, betwixt 11 or 12 leagues.

Ahuys lieth upon a river, where sometimes is before the towne 10, or 11, and sometimes also no more then 4, or 5 foot water, according as the water commeth out of the land, upon it is a great fishing, where in the Somvertime are great store good fish taken. To the eastwardes of the mouth of the River runneth of a stony flat from the shoare, and to the southwards of the river a foule stony riffe, right off from the shoare alongst by the foresaid flat, so that there lieth a channell betwixt the foresaid flat and riffe, which is called the Eastergat.

Through this foresaid riffe lieth in a channel untill into the Eastergat, on against the flatte, which is called the Southergat. If you will sail into this southergat, comming from the southwards, then runne to the west shoare to the southwards of Ahuys, untill you come in 5 or 6 fathom, & then you shall see up on the north shoar, north and by west or somewhat more westerly from you, a cape or beakon standing a little from the strand within the land, of fashion like a mill without wrings: Bring this beakon to the W. side of the high hill, which lieth somewhat further in to the land, to wit, even in the going of the highest of the hill, keepe these markes so standing, and sail in right with them, untill that Ahuys commet over that tree, which standeth there at the Northend of the wood, or that the white Countrie church come to the N. wards of the litle houses of Ahuys, then goe on N.w. or bring that foresaide white-countrie church in a litle valley, a litle to the N. wards of an old ruined castle, whereof there standeth yet some of the walls upon the northside of the River, and sail so on, untill that Ahuys come to stand in the middest of the River, anchor there in two fathom and an halfe, or 3 fathome, there is the roade there can goe no sea. In this southergat it is two fathom, 2 fathom and a half, and sometimes also at least 3 fathom deep.

R. 2

For

Eastergat
Ahuy.

For to saile into the Eastergat, comming from the southwards keepe in fixe or seven fathom, and runne so the North shoare, and then you runne alongst without the riffe, that lieth of by south the rivers mouth from the west shoare untill that Ahuys doe stand right west from you, then there commeth a great tree to the north side of the wood, that standeth upon the west shoare, keepe that so standing and runne in right with it, untill that foresaid countie-church come to that a foresaid old peece of wall, of the old ruinous Castle, and then right in, as hath bene before said. Or runne in by the first marckes, untill within a shot of a cast peece neer to the west shoare, and then edge up to the north shoar, untill that Ahuys come in the middest of the river, and anckor there, as hath is been said.

Hanno.

Hanno is a litle high round Iland, which men may saile round about, under it is good roade for south and southeast windes.

Behind Hanno runneth up a litle River to Selsbrough, but serveth onely for small ships or Crayers, which go not deepe.

Fleholm,
Rottenbuy

From Ahuys to the Rockes the course is east and by south twelve or thirteene leagues, betwixt them both lie divers litle townes, as Fleholme and Rottenbuy, where men may anckor before, in fixe, seven, and eight fathom good anckor ground: And other havens more, but litle or nothing knowne by Hollanders, Thwart of Rottenbuy lieth a great Rocke somewhat of from the land, calle dMalqueren, under which men may also ride.

From the north point of Brunthollom to the Rockes the course is northnortheast sixteen leagues, but from the point of Sandhamer eastnortheast 17 leagues. If you runne alongst close by the north point of Brunthollom, you shal run with a north-waye, alongst even without the rocks: but it, of you run alongst close by the point of Sandhammer, and will saile from thence to the Rocks, you shal with a northeast and by east waye fall with the land even within them, or to the westwards of them.

The rocks

The Rocks are som litle rocks together, which men may saile round about, but can have to Roade under them; they lie 3 or 4 leagues distant from the maine land, and are smaller then the Earholmes.

A league or two to the northwardes of them lieth the Vrouwen or Greene Iland, by some called the Rough-iland, and also the Outliers: It is not so baocken in it selfe as the Rocks, and also much greater, of to seawardes from it, lie some rocks, to the westwards of it, it is al full of rockes, some above and some under water, alongst even fast to the land, you may saile about within the Greene-iland betwixt, it and the rockes, but no man can doe it, but he must be verie well acquainted there, and then also not without great daunger. To the Southwardes of it you may also finde Roade at some places, but you must be verie wel acquainted, and also not without daunger, by reason of the multitude of suncken Rocks and sharp grounds. The east side of the Outliers lie from the rocks northeast and by north. The South end of Oeland is a sharpe pointe, and lieth from the rockes east and west about eight leagues distant. Thwart of it, betwixt the maine land and the aforesaid South-pointe of Oeland, it is about four leagues broad, betwixt them both goeth in the Calmer-sounde.

For to saile up into the Calmersound, then goe on from the rockes, or from the Outliers northnortheast, and then you run in betwixt Oeland and the maine land, saile in there betwixt them both, a middest the channell, both the shoares are verie foule but if you come not nearer them, then in seven fathom, you can take no hurt there.

From the Rocks to Calmer are fifteen or sixteene leagues: About halfe wayes betwixt them, Northwest from Southerorden, the southermost point of Oeland lieth the towne of Christianopell, lately builed there upon a litle Ilands by Kings Majestie of Denmarcke, and so called after his name. Thwart of it was wont to lie upon the maine land a litle town called Overschare, now it is one with Christianopell, thwart of it lieth a ledge of rockes about a great English mile of from the shoare southeast into the sea, come no nearer it then in 10 fathom.

Christia-
nopol.Over-
schaer.

At Christianopel is a haven on the east side, from it lieth off a riffe towards the northeast into sea; therefore he that will saile in there, must come in from the northwards for to avoide this riffe.

To the northwardes of Christianopel towardes Calmer, it is on both sides (as well on the side of the maine land, as on the side of Oeland) all full of rocks and foule grounds, but you may found both the shoares: in the middest betwixt both in the farewaye, it is tenne and twelve fathom deep, all soft claye ground, to the southwards of Christianopel it is deeper, but to the northwards towards Calmer it is by litle and litle shoulder.

Two leagues to the northwards of Christianopel lieth Bercken haven, there men doe lade oken beams, there within it is good lying, but verie badde for to come in or out, because off the multitude of suncken rockes, and other foule grounds, which lie before it about a half league of from the shoare to Seawards.

Bercken-
haven.

About a league to the northwardes of Berckenhaven lieth Hofmes ground, which is a verie bad foule ground, lying some what farther off from the shore to Seawards, then the other rocks which lie alongst the shoare, thereof you must take heede.

Hofmes
ground

About a league to the southwardes, and two leagues to the northwards of Hofmes ground lieth a point called Steenfoe, which is a somewhat high rough and verie foule point, a halfe league long, lying within, a halfe league neare to the towne, to the westwardes of it runneth in a great bight, where is good lying also for many shippes, but you can not come in there, because of the manie foule grounds and dangers, except it be with a verie skilful Pilot: upon the west side, over against the pointe standeth a white house. The King off Denmarcks armie of ships laye there, in the time of the last siege of Calmer.

Steenfoe

When you come so farre in, that you leese the south end of Oeland out of your sight, then you gette the Castle of Calmer in sight, saile towards it but shunne the shoares, as hat been saide here before. The Castle hath four great towres, when the two eastermost of the four come one in the other, then is the Castle about northwest from you, then you come by the Grimschaer, this is a Rock good to be knowne, upon it standeth a mast, with a Barrell upon the toppe of it, which lieth much nearer the west shoare then Oeland, when you get it in sight, then saile towards it. Thwarte of the Grimschaer or Tonholm lieth a suncken rock, about a cables length of from it, and a litle more to the eastwards, upon it is no more then five foot water.

Castle off
Calmer.

The farewaye is through, betwixt this suncken rock and the Grimschaer about northeast and by north, saile close alongst by the Grimschaer, leaving it on the larboard side, and then the foresaid suncken Rock remaineth on the starboard side of you.

Being a litle past the foresaide suncken Rock, and Grimschaer, you come then on against the west end of a long small rock, which lieth farre to the eastwardes, towards Oeland, and lieth almost even with the water, at some places a litle above water, and at some places the sea runneth alongst over it, edge then a litle up to the northwards, and runne about by the point of that rock, being past that, you shal meet on the larboard side a low rock, from the which there shooteth of a litle taile to the northwards, upon it standeth a litle beacon, saile alongst by it, and being a litle past it, then shall the towne lye westsouthwest from you, let your anckor fall there in five or fixe fathom, there is the right road. If you come to anckor somewhat northerly in the roade, you must be care full to take heede of a suncken rock which lieth no more then eleven of twelve foot under water.

Suncken
rock.

The markes of this suncken rock are these: When the milles upon the Mulholm are one in the other, with the mill which standeth on the north side without the towne, then you are thwart of the foresaid suncken rock; On both sides of it, as wel to the northwards as the southwards of it, it is deep enoug. It is good lying there, almost with all windes, but a north and by east winde is the worst, which bloweth there in open. With shippes that go not deeper then fixe or seven foote, men may come to lye at the bridge before the towne.

You may also saile to the westwards of the Grimschaer: that is, through betwixt the Grimschaer and the land, with shippes that go no not deep, but he that shall doe it, must be verie well acquainted there, for there it is all full of Rocks, some above and some under water.

From the southend of Oeland, called Southerorden, lieth of a great dangerous riffe a league and an half into sea, there it is seven and eight fathom deep, when the Chappel upon Southerorden is northwest a great league from you, there it is ten and eleven fathom deep; you may founde about this riffe in eight or nine fathom, but it is not good to come nearer it, when you can doe otherwise, and can passe it.

The riffe
of Souther-
orden.

The east Coast of Oeland is a cleane Coast, and lieth north northeast, and southsouthwest.

Of the Iland Rugen.

To the westwards of the Iland Rugen men doe saile up into the Ielle unto Straelsound. For to sail from Straelsound out alongst the Ielle, goe on north, and north, and by west, there lieth

For to sail
le out at
the Ielle.

lieth a Middle-ground, sometimes there standeth a beacon upon it, and sometimes not, leave that on the larboard side, being past that, saile to the point where the wood standeth upon, so that the town come behind the wood, you shall then see a verie high tree, bring that over the flattest steeple, and keep it so a while standing, going on still north, and north and by West unto the beacon the Ielle. When as you lose up about by it West, then looke out for two trees, which stand upon the east shoare, somewhat within the land, bring them a ships lengt without the highest tree, which standeth upon the shoare, and loofe up about the beacon, towards the buye. In the mouth of the deepe lie 3 buyes, which in sailing out you must leave all on the larboard side, but in sailing in all on the starboard side. It is not deeper in the mouth of the Deepe then 6 and 7 foote, and also without, it is farre of shoulde Water.

The Island Rugen hath four points that lie out, under which men may ride at divers places, as Doornbosch, Witmondt, Iasmond and the Peert.

The point of Doornbosch lieth from the Ielle north and by west distant two leagues, it is high land with a steepe point, men may ride under it for northeast, east and southeast winde. If you will anchor there, then anchor in 3, 4, or 5 fathome, so that the steepe point stand northnortheast from you, or that the Church stand over the point, or anchor where about that it shall please you, or shall be best convenient, it is there al over shallow Water and clean sand-ground.

From Doornbosch to Brontholme, the course is northeast and by east, 17, or 18 leagues, but Doornbosch and Easterbornes Riffe lie northnorthwest and southsoutheast, fourteene leagues afunder.

From Doornbosch to Witmondt, the course is northeast and by east four leagues. Betwixt them both goeth in a great Bay, where you may run in alongst by Witmondt, and have roade there in five or six fathom, for southwest, south, and also for and East winde.

If you will seeke roade under Witmondt for westerlie winde, and runne about by the point comming from the Westwardes, then come not nearer the point, then seven or eight fathom, there shooteth of an uneven shoulde, which you must avoide, being come about the point, anchor there in twelve, thirteene, or fourteene fathome, that is aboute a league from the shoare, nearer to the shoare in 7 or 8 or tenne fathom, the ground is not cleane, in twelve fathome you have grosse sand, in thirteene or fourteene fathome soft ground, so that with

harde winde you should neede to shoe your anchor, you lie there also landlockt for a west and south winde.

Iasmond lieth from Witmondt eastsoutheast distant three leagues. Roade under Iasmond.

If you will anchor under Iasmond, for a west or Westnorthwest wind, then saile so for about the point, that it come to be northnorthwest, or somewhat more northerly from you, when you come about the point, you shall see in the southwest or somewhat more westerlie from you, a little thick wood of trees, upon a plain hill, and on each side of that little wood, a little sharpe steeple, and also a great tree, like as if it were a mill without wings, when that tree commeth to be Southwest, and by west from you, anchor there in 9 or 10 fathom, there is in different ground, according as the ground is there, by the point of the land, it is about 13 fathom deep.

Or bring the north point northwest, and the other point southwest and by south from you, and anchor there in tenne or eleven fathom, there it is good soft ground, but it lasteth not long, so soone as you finde the soft ground you must let fall your anchor, for the ground is there at manie places not cleane, or you must saile farre about both the points, there you lie landlockt for a northwest, and northwinde, in 10, 11, or 12 fathom, good soft ground.

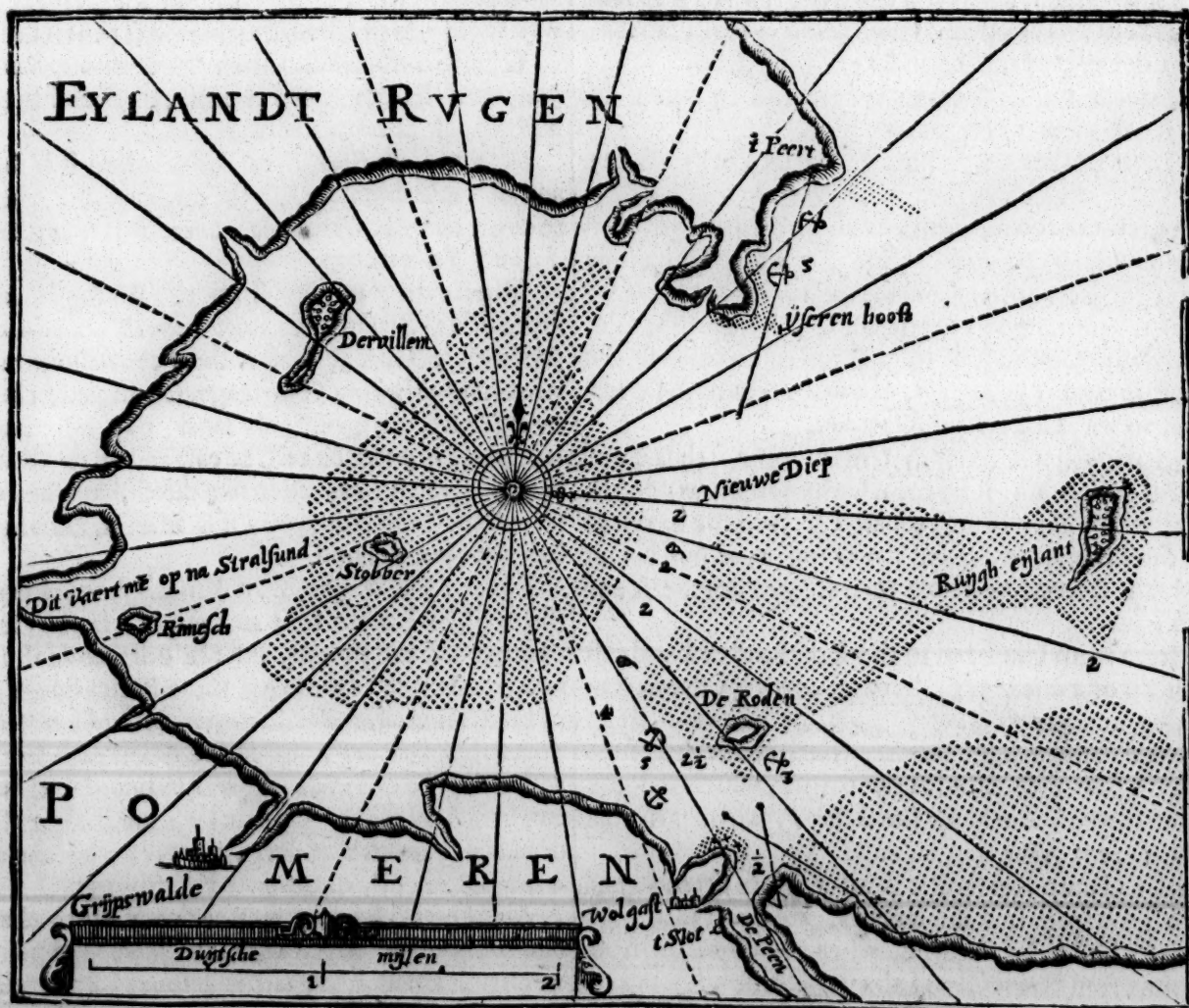
The Peert, which men doe also call the great Buck upon Iasmond, is a tuffe of 3 or two, and is a point that lieth out with two points, where is betwixt them both a faire Sand-bay, where is good lying in 4 or 5 fathom clean ground.

Iasmond and the Peert lie southsoutheast and northnorthwest distant 3 leagues.

To the Southwardes of the Peert goeth in that New deepe, where men doe saile through to Statin.

About a league south, somewhat Westerlie from the Peert lieth a pointe, called the Ironhead, there lieth off a little riffe, therefore you must run alongst somewhat without that point, and being a little past that point, you can see the outmost buy of the New-deepe, wherein lie 2 buyes in the midst of the deepe, so that you may saile alongst on both sides of the buyes, but with shippes of great draughts, you must close along to the eastwardes of the buyes, there is the very deepest of the channel. By the outmost buye it is at the shouldest, there is the barre, commonly there is 11 foot water, or a little more then 11 foot and a half, and sometimes also well 12 foot, but in the midst of the mouth of the deep it is commonly still twelve foote, and sometimes more. For to sail into the Newdsep.

The New-deepe.



Upon the Peert lie 3 high hommocks, the Westermost of them is the greatest, one great round hommock, when you keep that right without the Ironhead, and then run on Southsouthwest then you can not saile amisse, althrought there were no buyes in the mouth of the Deep.

When you come over the barre, you shall finde againe four

and five fathom depth, being litle over it, you must go on S.E. unto the entrance of the Peen, with that course you leave the Island of the Roeden lying at least two Cables lenghts on the larboard side. It is there all over good anchoring.

If you will saile in to the Peen you shall espie (sailing thus right out a head at the east side of the Peen, two pointes, keep

the eastermost a handspikes length without the westermost (for to avoid a stonie should, which runneth off from the West point of the Peen) untill that you come before the Peen. Upon the east shoar stand two beakons, bring them one in the other, and run so into the Peen, which lieth in first Southwest but in the comming in, there is no more then sixe foote, or six foot and an half water.

Roede
under the
Roeden.

If you will ankor under the Iland the Roeden, you must be mindfull of a little riffe, that lieth off from the Roeden to the Southwards, towards the maine land, and ankor there, either to the westwardes or to the eastwardes off it, accordings as the winde shall be, in three fathom, or two fathom and a halfe, so shoulde or deepe, as you please, [there is the common roade for the ships.

Rough
Iland.

The Rough Iland lieth from the Roeden northeast and by east distant about two leagues.

For to faile
out to
the east-
wards off
the Roede

About eastnortheast from the Roeden lieth also a Channell into the sea, a litle to the southwardes of the Rough Iland, that is good for to runne out with westerly windes, when you can not come out at the Newdeepe, & also for those that are bound to Danfke, or to the eastwards. From the Rough Iland lieth of a little riffe to the southwardes, which you must avoid, and runne through betwixt that & the shoulde which runneth from the shoar, thwart of it is the barre or shouldest of this Channell not lesse then eleven or twelve foot water, that is a short out let, being over you shall gette presently deeper Water. This Channell is Pilots water. Upon the Iland the Roeden dwell Pilots, which doe bring out the shippes there. The coast off Pomeran lieth from the New deep to Colbergen east and west about sixteene or seventeen leagues.

Camin.

Betwixt them both lye yet two channels, the Swinne, & the Channell of Camin. The Swin lieth seven leagues Eastwardes from the Newdeepe, which runneth through with a little river into the Haff or broade water, right over against the River of Stetyn. Camin lieth five leagues to the eastwardes of the Swin, upon the east end of the Haffe or broad water of Stetyn: that Channell goeth through also with a river into the Haff.

Banck.

Four or five leagues without the land, when Iasmond is west, or thereabout, the Peert westsouthwest, and the Rough Iland southwest and by west from you, there lieth a banck off seven fathome, upon one place somewhat lesse, and upon an other somewhat more, betwixt it & the land towards Iasmond it is again thirteen, fourteene and 15 fathome deep, but to the eastwardes of the Newdeepe, alongst by the coaste of Pomeran, it is all shoulde water, of four, five, sixe and seven fathom, so farre into the sea, that when you can but even see the land of the Swin, there it is not deeper then seven or eight fathom, without sight of the land it is 12 and 13 fathom deep.

Colber-
gen

The New-deepe and Colbergen lye east and by north and west and by south 16 or 17 leagues asunder.

The Haven of Colbergen you must faile into between two heads, untill you come before the towne. Within in the River, right over against the town, lieth a Well or Brook which can give all the countrey thereabout salt, of water which they feeth, and yet the water of the river is fresh as Milk, for it is a little water that commeth out of the land. The coast off Pomerland lieth from Colbergen to Gashead eastnortheast and westsouthwest aboute 13 leagues, betwixt them both lie two havens more, to wit, Cosslyn and Ruwolde.

The haven of Cosslyn lieth from Colbergen northeast and by east four leagues distant. And from Cosslyn to Ruwolde, the course is northeast and by east five leagues. Into the haven of Ruwolde, or the little river, called the Wipper, an indifferet ship may go in. It is from Ruwolde to Gashead northeast and by east four leagues.

the stolp

The land lieth from Gashead to the Rosehead east and east and by north 19 or 20 leagues, betwixt them lye the havens off Stolp, Liba, and Sernevis.

A little to the eastwards off Gashead lieth the haven of the Stolp, which is a River so called as the towne, which runneth up to the same towne, onely for small ships, although that there doe indifferent great ship lade.

From Gashead unto Reefcoll it is all a white Strand, and lieth eastnortheast from it foure leagues. Reefcoll is a high round hill very good to be knowne, when you come off from Brondthollom. From Reefcoll to Liba is 7 leagues.

Liba

Sernevis

Liba lieth upon a great river, called the Osse. From Liba to Sernevis are five leagues, betwixt them lye the three Woolfacks, which are three black tuffens of trees, where by this land is very good to be knowne, a little to the eastwards off these three litle hommocks lieth a long hill which doth shew it selfe (when you come out of the west) on the west end divided into three or foure litle hommockes. Seven or eight leagues to

the eastwards off the Woolfacks followeth the high land off Rose-head, which is very steep upon the water-side. Betwixt the Rose-head and Reefcoll it is all white strand, and most of the land grown with trees.

Sernevis is a little towne lying upon a little off-water which with a little river runneth into the sea, but whitin, it doth spread it selfe into a great river. It is from Sernevis to the Rose-head four leagues.

You may sound aboute the Rose-head in 15 and 20 fathom, and also you may well ankor under the Rose-head, there is better ground then under the Heel. All the strand off Pomerland is alongst the sea side above all black with trees.

Of the Depths.

In the farewaye the northwardes of Bronthollom alongst to Rye, it is deep betwixt Oeland and Bronthollom five and thirtie, sixe and thirtie, and eight and thirtie fathome, but comming against Oeland, so that the south end come to be northwest and by north, northwest, and northwest, and by west five or sixe leagues from you, there you shall finde verie uneven grounds. Southeast five or sixe leagues from Southerorden, are grounds of nine, tenne, twelve and sixteene fathome, in the nine and tenne fathome soft ground, that there remaineth nothing upon the lead, but in the fourteene or sixteene fathom, it is grosse redde and black stonie sand ground, almost like gettes. Nearer againe to Oeland it is againe deeper water, and farther from the land it is also deeper, but al uneven ground; the south end of Oeland, being about northnorthwest from you eight leagues, there it is againe sometimes twentie, fourteene and also well tenne and nine fathome in the shouldest deepe, all stonie ground, that there remaineth nothing upon the lead, but in twentie and five and twentie fathome grosse red and black stonie sand. He that sayleth with a northerly wind over these foresaid shouldest, of teen, eleven and twelve fathome, and is bound to Bronthollom, let him goe on westsouthwest, for to sayle clear of Brontholm, if he reckon to come against it by night: the Bleesche side he may bouldly runne to by the lead in seventeene and eighteene fathome. The point off Sandthamer runneth farre off flat, at hath been said here before, you may runne about by it in 7 and 8 fathome.

Betwixt the Rockes and Oeland, in the farrewaye to Gotland it is eight and thirtie, and nine and thirtie fathome deepe, easie claye ground.

When Southerorden is northnorthwest, somewhat northerly a league from you, there it is 13 fathom deep.

When the little chappell upon Southerorden is westnorthwest from you two leagues, there it is thirtie fathom deep.

When Southerorden lieth West two greate leagues from you, there it is seven and twentie, eight and twentie, and nine and twentie fathom deepe.

Betwixt Easterborne and Brontholme it is thirtie, and five and thirtie fathom deep, in the farewaye, but when you beginne to come neare Easterborne, there it is shoulde water of 14, 15 and 16 fathom.

When you (comming from the West) faile alongst by the south side of Brontholm eastsoutheast about a league without the land, and that the east ende of Brontholme is east, somewhat southerly about two leagues from you, there it is deep 7 or eight fathom grosse pale sand, that lasteth untill that the foresayd eastende be east, & east and by north aboute a league and a halfe from you, all in one depth, but when it commeth to be eastnortheast from you, it is fiftene fathome deep, small balckish sand-ground.

Four or five leagues from Brontholme, when the east end (from which Brewis-riffe runneth of) is aboute eastnortheast or northeast and by east, and the northende aboute north, or north and by east from you, there lieth a banck of seven, eight or nine fathome, and lieth northwest and southeast more then a great league long, the southermost ende lieth about southwest from the east ende of Brontholme. He that meeteth with this banck by night, may make some gessing thereby, for to direct his course thereafter, wheter he be bound eastwards towards Reefcoll, or towards Easterborne.

Aboute two leagues eastsoutheast from the foresaid east end of Brontholme (to wete, the lowe sand point, where Brewers-riffe lieth of, of there it is four and twentie and five and twentie fathome deepe, stonie ground.

About four leagues east, somewhat easterly, or East and by North from Meun, lieth a banck of eleven and twelve fathom, which lasteth from thence with a northwest and by west course, untill that Meun come to be westsouthwest, or southwest and by west from you, then it is againe eighteen, nineteen, and twentie fathom deep, soft ground.

Faster-

Fasterborne shall then be N. N. W. and Steden W. N. W. from you, going on with that same northwest and by w. course, you shall then get by little and little shoulder water, to weste, fixteene and aiteene fathome, and close by Steden fourteene, thirteene, and twelve fathome. He that cometh from Witmond or Iasmond towards the Sound, and runneth alongst 4 leagues without Meun, runneth alongst over this foresaid banck, he that findeth him selfe by night upon it, hath a good marke for to make his reckoning thereafter.

Betwixt Brontholom and the coast of Pomerland, in the fareway, when you can see Brontholom, it is 26 fathom deep, but so farre to the S. wards that you can see the coast of Pomerland, there it is 7 and 8 fathom deepe, but without sight of the land 12 and 13 fathom deepe. Alongst all the coast of Pomerland betwixt the New-deepe and Rosehead, it is alongst by the coast 22 and 20, and also well 25, fathom deep.

Betwixt Colsbergen and Garthead it is all flat even strand & ground, without any bankes. In the fareway betwixt Bruntholom and Reefcoll, it is 27, and 28, fathome deep, but farre to the northwards of it, it is at least 35 and 38 fathom deep.

Northwest from Reefcoll 4 or 5 leagues from the land, lieth a banck of 9, 10, and 11, fathom, when you come from Bruntholom, and Reefcoll cometh to bee southeast and by east from you, then you come against this banck, and endeth when Reefcoll is south and by east from you.

From this foresayd banck towards Bruntholom, it is 25, 30 and 36 fathom deepe, soft clay ground, but towards Reefcoll it is shoulder.

If you cast the lead often, sayling alongst that coast you shall finde more bankes.

You may boldly saile alongst this coasts by night, or darke weather in 8, 10 or 12 fathom of from Reefcoll untill about the Rosehead. Thwart of the Rosehead it is farre flat, and ground as riffe ground. Where you come past or about Rosehead it is very deep.

When the Rose-head is southsouthwest from you about a league, there it is 30 fathom deepe, but very uneven and full of bankes, and the ground white grosse sand.

Rosehead being S. E. from you, it is 28 fathome deepe, with red stony ground, almost like as of it were riffe sand.

Rosehead being W. from you, there it is 16 fathom deep, and white sand-ground.

Courses and Distances.

From the point of Sandhamer to Somerhaven, the course is north and by east	1 league
From Somerhaven to Ahuys north	5 leagues
From Ahuys to Hanno eastnortheast	2 leagues
From Hanno to the Rocks, the course is east and by south	11 or 12 leagues
From the Rocks to the Outliers north and by east	1 league
From the Outliers to Christianopell northnortheast	7 leagues
From the Rocks to Calmer northnortheast	15 or 16 leagues
From the Rocks to Southerorden, the southend of Oeland east	8 leagues
From Sandhamer to the Rocks e. n. e. somewhat easterly	17 or 18 leagues
From the north point off Brontholm to Ahuys north and by west, somewhat northerly	10 leagues
From the n. point of Brontholm to Hanno n. somewhat westerly	12 leagues
From the north point of Brontholm to the Rocks n. e. & by n.	16 leagues
From the north point off Brontholm to Southerorden N. east a little easterly	21 leagues

How these Lands doe shew themselves at Sea.

The south end of Oeland sheweth thus, when it is thwart off from you.

The Earholmes, being northnortheast from you, shew themselves thus.

Thus sheweth witmond, when you saile alongst by it, being 3 leagues off from it.

Witmonds

The Earholmes being east from you shew themselves thus,

Brontholme sheweth it selfe thus, when you come from the west.

In this forme ariseth the Earholmes, being N. from you:

Thus sheweth Iasmond, when you saile alongst by it, being 3 leagues from the land.

Here under is a great bay, a league long.

Dornebosch.

Thus sheweth themselves witmond and Dornebosch, wit the land betwixt them both, when it is about southsouthwest from you, so farre that you may but even see it from belowe.

The Rose-head.

VVoolfackes

Reefcoll.

Thus sheweth the land betwixt Reefcoll and the Rose-head, when you saile alongst by it 3 leagues without the land.

Thus sheweth the land betwixt Colbergen and the Stolp, when you saile alongst by it about 2 leagues without the land.

From the southend or e. end of Brontholm to the Rocks n. n. e.	19 leagues
From the east end off Brontholm to Southerorden northeast, somewhat northerly	24 leagues
From Southerorden to Reefcoll south and by east	24 leagues
From the Southerorden to Rosehead southeast	33 leagues
From Southerorden to Quinsbrough-Deepe southeast and by east, and south-southeast	48 leagues
From Southerorden to Dermemell east and by s. and e. s. e.	48 leagues
From Southerorden to Sevenbergen east and by south	48 leagues
From Southerorden to Derwinda east and by north	57 leagues
From Southerorden to the south end of Gotlant east N. E.	23 or 24 leagues
From Southerorden to the Great Karell northeast	27 leagues
From Vasterborne to Elburgh east and by north	4 leagues
From Elburgh to Wittee east	8 leagues
From Wittee to Goesbeer eastnortheast	3 leagues
From Goesbeer to Santhamer northeast	1 league
From Vasterborne, or from the riffe to Brontholme east	10 leagues
From Vasterborne to the northwards of brontholme east by north	20 leagues
But to the southwards of brontholme east, and east and by south	20 leagues
From Wittee to the north point of brontholm s. e. and by east	8 leagues
From Meun to brontholm east and east and by north	21 leagues
From Steden to the north end of brontholm e. and e. and by n.	24 leagues
From Vasterborne to Whitmond southeast	19 leagues
From Vasterborne to Dorubosh southsoutheast	13 or 14 leagues
From Meun to witmond southeast and by south	12 or 13 leagues
From Meun to Dornebosch southeast and by south	9 leagues
From the Ielle to the point of Dornebosch north and by west	2 leagues
From Dornebosch to whitmont, the course is northeast	4 leagues
From whitmont to Iasmond eastsoutheast	3 leagues
From Iasmond to the Peert southsoutheast	3 leagues
From brontholme northeast, somewhat easterly	19 leagues
From whitmont to the n. end of brontholm N. E. and by E.	14 leagues
To the south end east and by north and eastnortheast	13 leagues
From Iasmond to the south end of brontholm N. E. and by east	13 leagues
From the Peert to the south end of brontholm northnortheast	14 leagues
From Iasmond to Camyn eastsoutheast somewhat southerly	19 leagues
From the New-deepe to Colbergen, the course is e. and by n. 16 or 17 leagues	17 leagues
From Comyn to Colbergen eastnortheast	4 leagues
From Colbergen to Callyn northeast and by east	4 leagues
From Callyn to Ruwolde northeast and by east	5 leagues
From Ruwolde to Garthead northeast and by east	4 leagues
From Garthead to Reefcoll E. N. E.	4 leagues
From Reefcoll to Lyba east and by north	7 leagues
From Lyba to Sernevis east	5 leagues
From Sernevis to the Rose-head, the course is east	4 leagues
From Colsbergen to Garthead eastnortheast	13 leagues
From Reefcoll to Rose-head, the course is east	16 leagues
From the S. end of brontholm to the Swin, south and by west	13 leagues
From the south end of brontholm to Colbergen s. e. and by south	16 leagues
From the south end of brontholm to Reefcoll, the course is east and by south	24 leagues
From the south end off Brontholm to the Eartholloms north and by east	4 great leagues
From the north end of Brontholm, or from the Eartholloms to Rose-head, the course is east, and east and by south	50 leagues

How most off all the chiefeft paynts and places of the east sea do lye distant from Brontholom.

From brontholm to der Memell east, somewhat northerly	65 or 66 leagues
From brontholm to Der Lyba east and by north somewhat northerly	67 or 68 leagues
From brontholm to Derwinda eastnortheast	80 leagues
From brontholm to Houbrough, or the southend of Gotteland northeast and by east	50 leagues
From the north end of brontholm to Southerorden, the southend of Oeland northeast somewhat easterly	25 leagues
From the south end of brontholm to Southerorden northeast, somewhat northerly	27 leagues
From brontholm to the Rocks or out rocks northnortheast	19 leagues
From brontholm to Hanno, the course is north	12 leagues
From the north end of brontholm to Sandhamer northnorthwest	5 leagues
From the north end of brontholm to the point of Goesbeer northwest and by north	5 leagues
From the north point of brontholm to Witte north	8 leagues

The second demonstration,

Where in the Seacoastes betweene Rygs-bead and the Winda are set forth.

From the Rose-head to the Heele, the course is south-east 8 or 9 leagues distant. When you come neare the Heele, you are almost ground of in thirtie fathom. On the Coast of the Heele close by the land, it is 24 and also 30 fathom deep.

Roade
under the
Heele

Under the Heele you may anchor in 12, and 20, fathom close by the land: the ground there goeth off very much. If you be a little off from the land, then you are ground off, north very farre without the land you have no ground in 40 fathom. A league to the northwards off the Heele there runneth off a flat from the land, whereoff you must take heed, when you will go to anchor under the Heele, you may anchor on both sides off the Heele, but on the inner side it is soft ground.

From Heele to Danske before the Wiffell, the course is south and by west 5 leagues. If you will anchor before the Wiffell, then anchor to the Westwards of the Chefts, or the Wester-head in 10 or 12 fathom.

Danske
Deep.

But for to saile into the Wiffell, or the Danske Deep, you must loock for the two masts with barrels upon them, which standeth upon the Chefts, or the Wester-head, bring one in the other, and saile in right with them, in betwixt the Chefts, but when you are within Termude, you must chose the easter shore, for the west shore is flat, when you come before Boatsmans flat, you must chose the side off the Green shore, and make there fast with foure hawfers or Cables.

Quins-
brough-
deep.

The Quinsbrough deepe lieth from the Wiffell, or the Chefts of Danske eastnortheast, and northeast, and by east 13 leagues. From the Rose-head east and by south 17 or 18 leagues, and from the Heele east and west 13 leagues.

From the Wiffell to the Quinsbrough-deep and all alongst to the northwards of it, is altogether a faire white sandy strand, upon both sides off the deep stand some withered trees, to see to as if they were burnt, but upon the south side stand two Capes, or beacons. If you will saile in there, bring the capes one in the other, when you come in 10, or 8 fathom, and saile in so right with them, and so you shall run right with the buyes, which lye on both sides off the Deepe to eight or ten in number, to with, on each side 4 or five, saile in betwixt them, untill you come within in the Kettell. There is no certainly to be Written off the lying in off this channel, as also of the Danske deep, whereunto men might trust, for by reason off the scouring off the Freshuts, and with great streaming off the Ice, they doe change oftentimes, and sometimes in short but time, the Lords off the land there have very great care to give charge, that they be alwayes well seth wit buyes and beacons.

For to anchor in the road without the deep, then anchor so that the point of Locksteed lye about north and by east from you, there it is 8, 9, and 10 fathom deep.

With in the Deep in the Kettel, men do lye to tarrie for the wind in 3 fathome and 3 fathom and a halfe.

For to saile up the Haff go out of the ketel about east untill you come against the Heert, and southeast over it, and then alongst the Haff amidst the channell unto the Haverstrom, the course is most east. Being over the Heert edge somewhat to the south shore for to avoid that riff which lieth off from the north shore about a third part into the Haffe, to with, from the point by east Fishouses there lieth a litle buye upon it, and come no nearer in then 12 or 13 foot. The right farre-way is to the southwardes of it 14 and 15 foote soft ground, untill Brandenburg, from thence further it is by litle and litle shouldertwelve, eleven and ten foot upon the Haverstraw. When you get the steeple off Quinsbrough in sight, then you shall see also by it a round black litle wood, keep the steeple on the north or east side of that litle wood, untill that you be past about Brandenburg, then let the steeple come a ships length to the eastward of the litle wood of trees, and saile so right with it, till you come by the buyes or litle trees of the Haverstraw, there you must run through amidst the channel betwixt them, untill you come into the Pregel which lieth up northeast unto the Towne.

From der Pillo to Quinsbrough are about 8 leagues, but to Melven. Melven it is about 9 leagues, you must also saile up there midst the channell about southwest, but the point over against the Pillo, where the castle Terbaly standeth, you must avoid somewhat, which runneth far off flat.

Foure or five leagues north and north and by west from the Quinsbrough deep lieth the point of Brusteroot, and betwixt

them both Loocksteed, whereupon standeth a Castle with a Church not farre one from the other, and also two high hommocks or hills, and the land there abouts is all full off trees.

From Brusteroot to the Deepe of Der Memell, the course is northnortheast, 16, or 17 leagues. It is there betwixt them both a faire strand, and the land lieth in a great bay. The Deep of Der Memell lieth in northeast, and northeast and by east, and is two fathom deep, within it you come into a great Haffe: you may runne to the westwards about the point, and anchor there where you will.

From der Memell to Heyligena, the coast lieth north and by east, somewhat easterly 4 leagues.

From Heyligena to the point of Sevenbergen, north and by east, somewhat easterly 5 leagues, that is with hommocks and hilly land.

Four or five leagues north and by east from Sevenbergen lieth Terlyba. There goeth in the land a litle river, but there can go in no shippes, there is no more then six foot water. On the north side of the River standeth a Gentlemans house or Castle, with a turret upon the midst of it, the north end off the house is covered with boards, and the south end with red tyles, to the southwards or the eastwards off it stand also some houses, covered also with tyles, in betwixt two woods to see to. If you will anchor in the road off Terlyba, then anchor a litle to the southwards off the Village so that the foresaid Gentle-mans-house with the turreth doe stand east and by north from you in foure fathom and a half, and five fathome lesse two foot, there is the best road and ground that is thereabouts. When you come out of the sea, and fall with the land to the eastwards or to the northwards of Terlyba, you shall see within the land a black wood, and the houses in a ragged valley off Sand hills.

From Terlyba to Derwinda, the course is northnortheast 16, or 17 leagues, betwixt them both the land lieth in a bight, so that the coast alongst by the shore lieth no so right, especially 4, or 5 leagues by south Derwinda, there it falleth away into a great bight, which men do call Sackerwyke, and also with more smaller bights and bayes towards Terlyba.

About foure leagues to the northwardes off Terlyba lieth a point called Stickeroot or Steenoort, thwart there of it is very flat, so that a good wayes from the land, it is not deeper then nine, tenne, and twelve fathome, all stony uneven ground, of this pointe you must take good heed, and not come to neare it. Anno 1599, in the Spring a man of Hoorn sailed somewhat neere to this should, and come on ground upon an unknowne rock, and lost his ship. To the northwardes of it, towards Derwinda, thwart of Sackerwyke it is all cleane ground, and farre flat, at many places a good wayes from the land not deeper then fixe and seven fathom clean sandy ground, good for to anchor in, when you lye by there with a northeast winde, and can get nothing with turning to windwardes. But if you keepe under saile, you may in turning to windwardes come neare the shore every where without feare in 4 or 5 fathom.

For to know this Coast off Coerland, then remember these places here under Written.

At Derwinda standeth a Castle with three Towers, which is covered above with red tyles, and under it is white, about a league to the southwardes off Derwinda, lieth the Bakeovens, which is next to Domesnes, the best land to be known of Coerland, it ariseth first when you beginne to see the land, in a white Sand-hill, the top whereof is full of trees, but when you come see neer the shore, that you can see the other land also, then there ariseth more land with hommockes, so that then it is not so good to be known.

About 4 leagues to the southwardes of it in Sackerwyke lieth yet a hommock or hill full of trees with some litle hommockes to the eastwardes of it, when you are thwart off Derwinda, you may even see it half wayes up to the top, but not well from below. This hommocke is called by some Duke Dalves castle, and lieth most alone: the land, as well to the southwardes as to the northwardes of it, is most all even and plain land.

About six a leagues to the southwardes of the foresaid hommock, and 5 or 4 leagues and an half to the northwardes off Terlyba, lye also two high hommocks close one by the other, the land to the southwardes of them towards Terlyba, is to see to farre of (when you are thwart off these two hommocks, or somewhat to the northwardes off them) as if it were a broken land, thwart of this about five leagues from the land, or when

Der Me-
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Terlyba

Sacker-
wyke.
Steenoort.

For to
know
Coerland.

Bakeo-
vens.

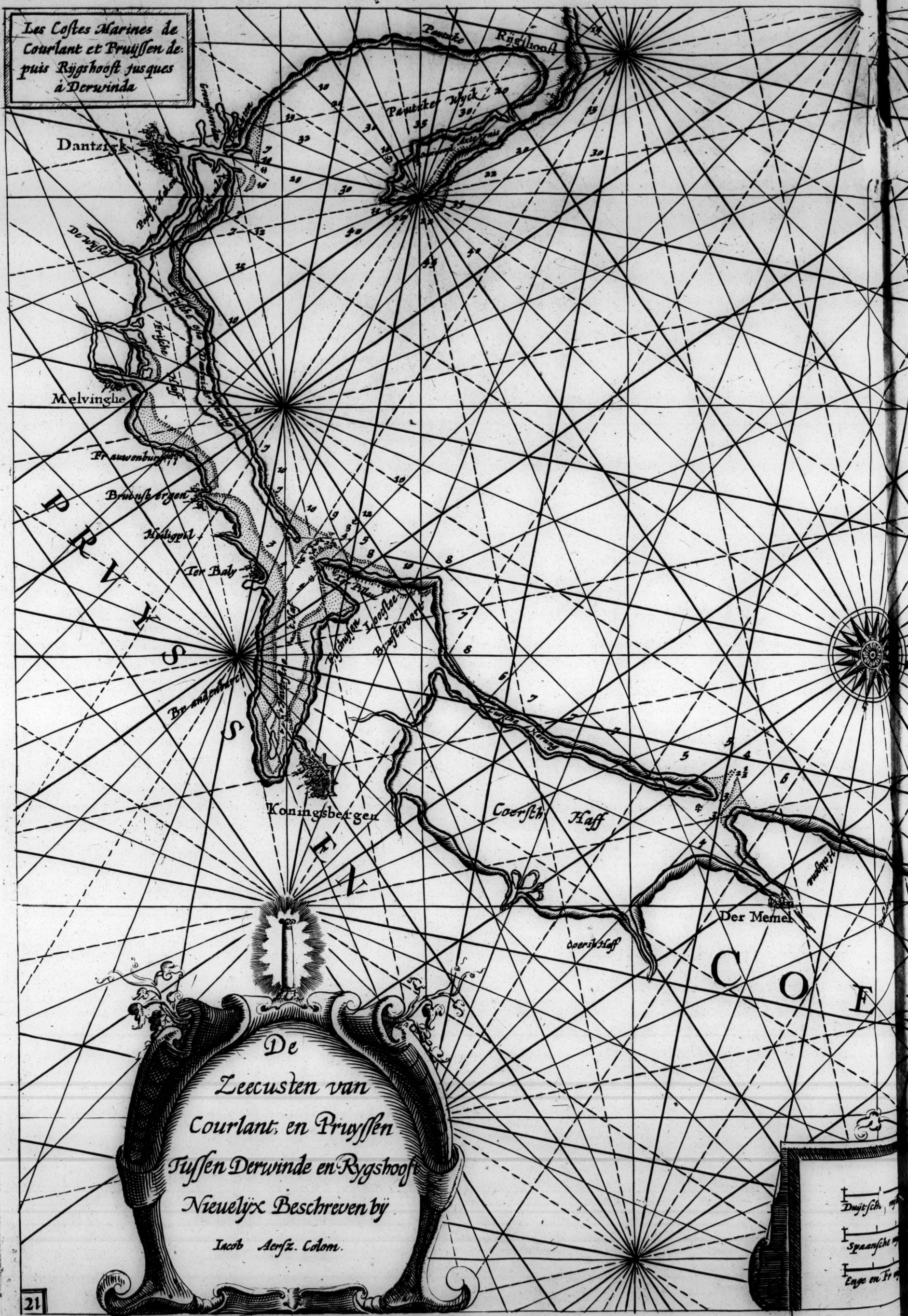
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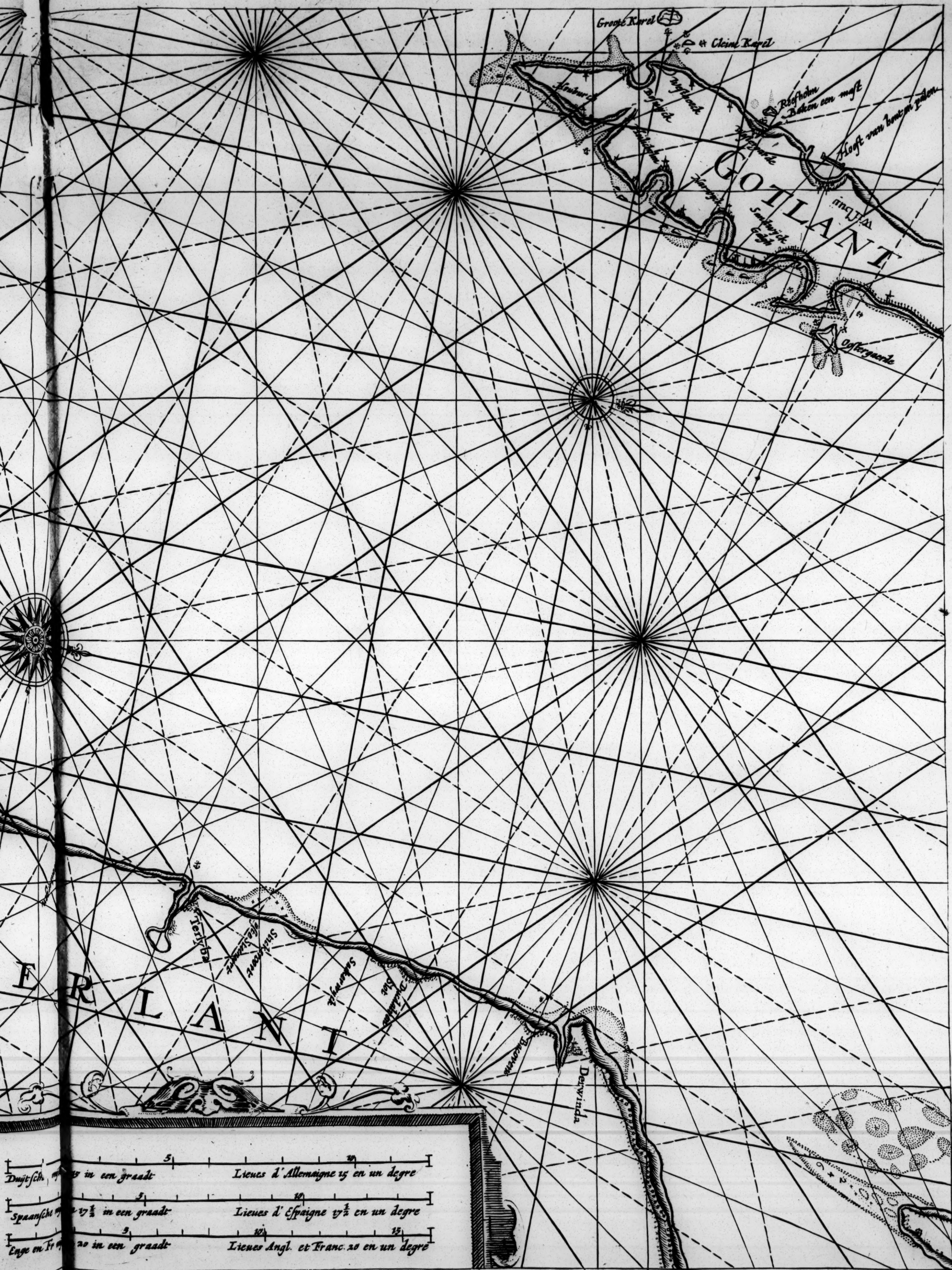
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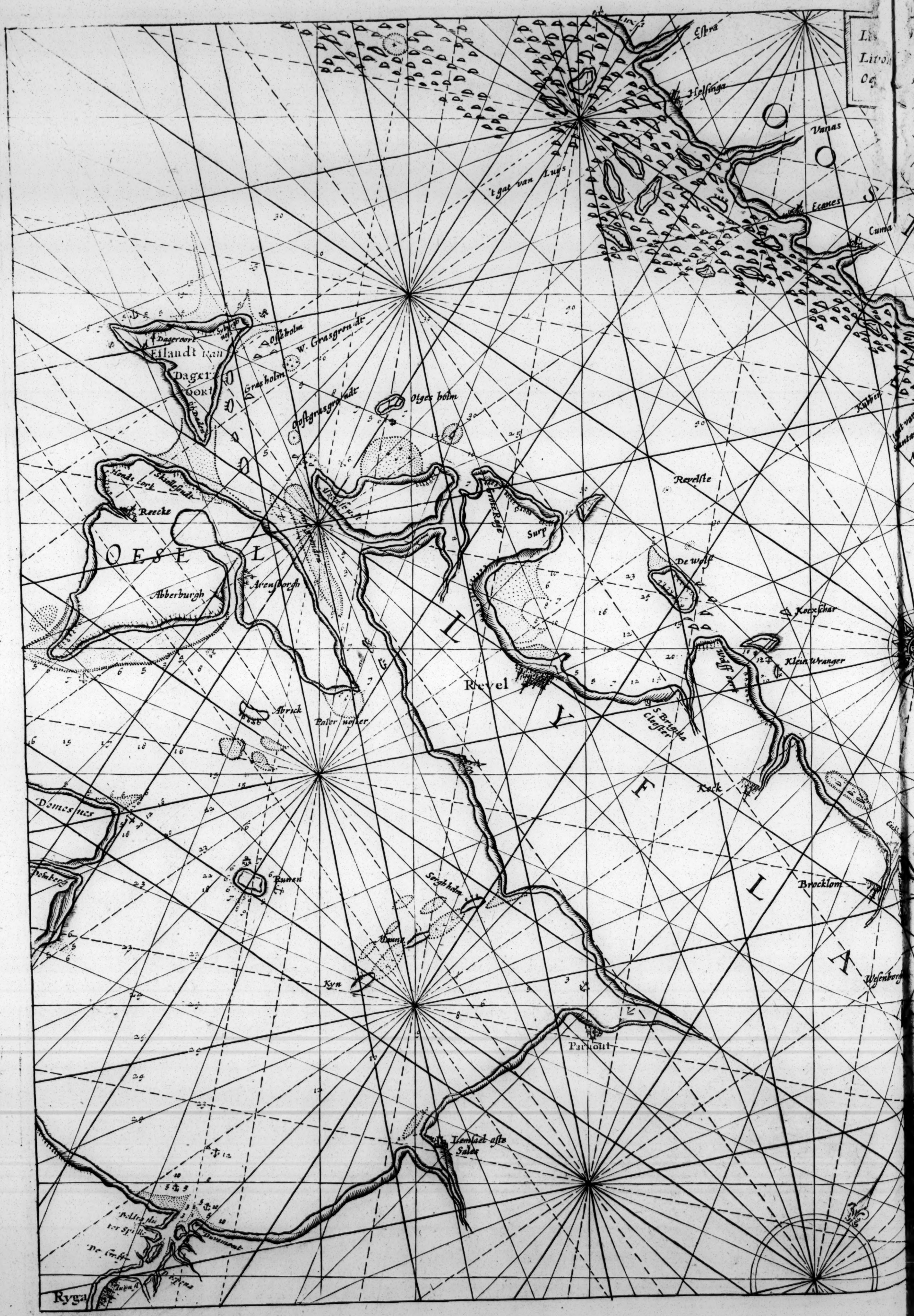
Les Costes Marines de
Courlant et Pruiſſen de
puis Ryghshoofſt juſques
à Derwinde



De
Zeeuſten van
Courlant. en Pruiſſen
Tuſſen Derwinde en Ryghshoofſt
Nieuelijx Beſchreven by
Jacob Aerſz. Colon.

Duijſch
Spaanſch
Engelſch



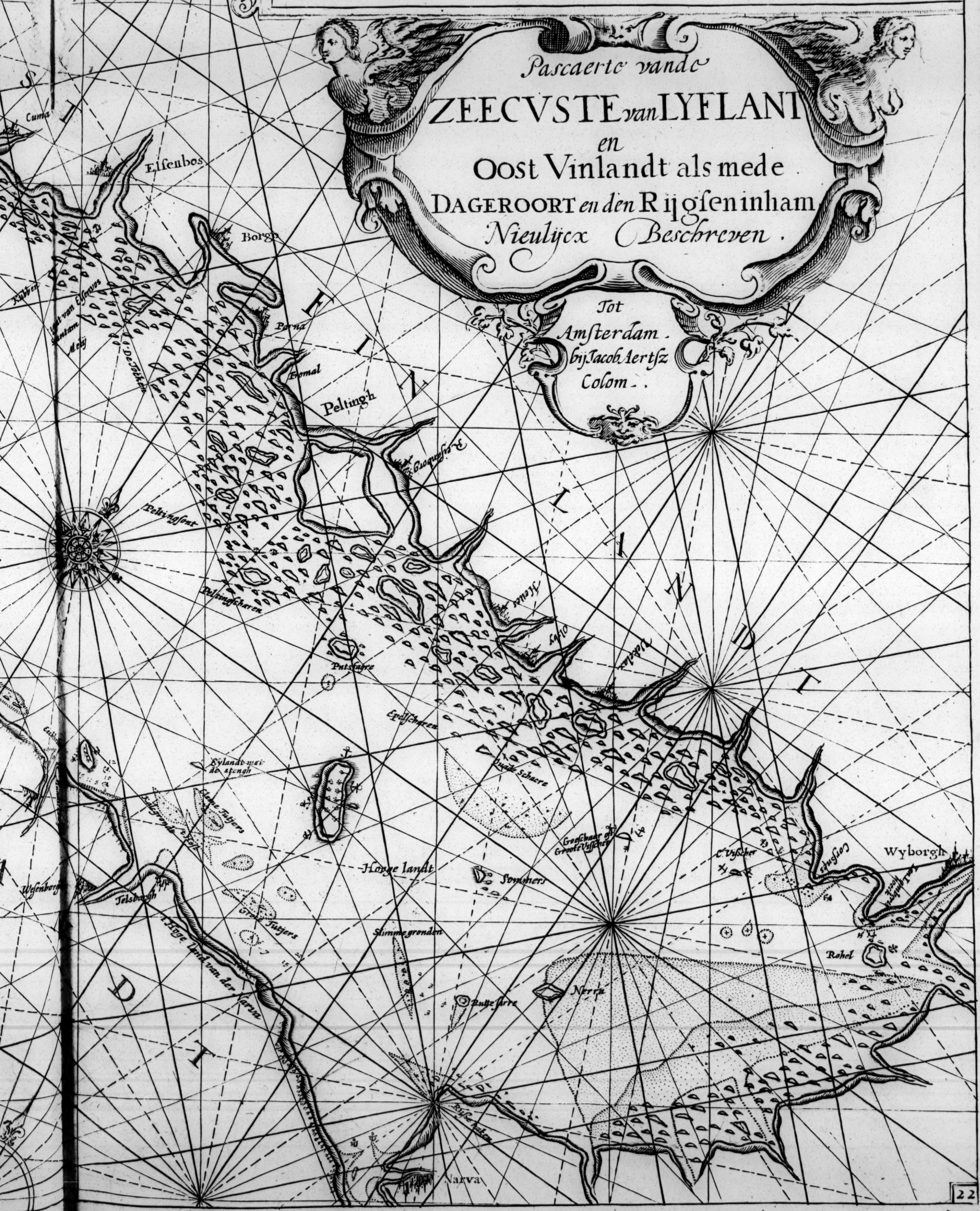


Les Mares de
et Finlant depue
sques à Wyborgh

Duytſche Mylen 15 in een Graedt	Lieues d'Allemagne 15 en un degre
Spaensche Mylen 17½ in een Graedt	Lieues d'Espagne 17½ en un degre
Engheſche en Franſche Mylen 20 in een Graedt	Lieues Angl. et Franc. 20 en un degre

Pascaerte vande
ZEECVSTE van **LYFLANT**
en
Oost Vinlandt als mede
DAGEROORT en den Rijgſen inham
Nieulycx Beschreven.

Tot
Amsterdam.
by Jacob Aertſz
Colom.



when you can but even see the land from below, it is thirty fathom deep.

When you begin to come about Derwinda within 2 or 3 leagues of the land, there lieth a banck of 12, 13, & 14, fathom: some say that west and by N. from Derwinda there should be no more upon that banck then 5, or 6 fathom water, it is about a halfe league broad, betwixt the banck and the land a league without the shore, it is againe 20 and 24 fathom deep.

If you will anchor before Derwinda, then bring that foresaid Castle about eastsoutheast from you, then it cometh almost behind the high land, and anchor in 5 fathom from the shore, there is the best roade.

Of the Depths and grounds about these coastes.

Between the Heele and the Rosehead, but neere the Heele, there it is 33 fathom deepe, and the ground is there white sand.

At the Heele in the roade it is 25 fathom deep, the ground black sand, and going of to 30 and 40 fathom.

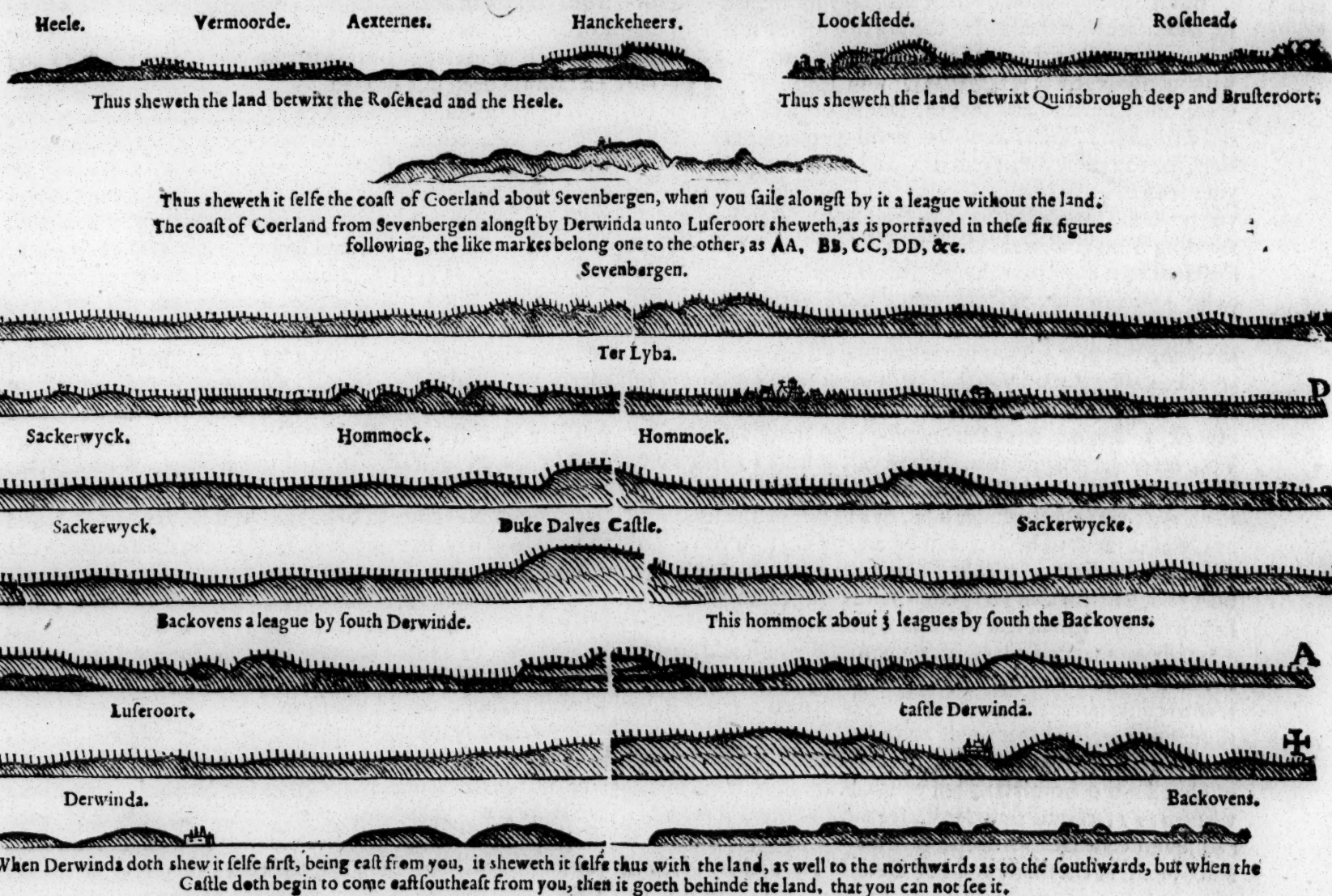
Between the Heele and Quinsbrough it is very deepe, coming neere the Heele it is steepe, but towards Quinsbrough and the Nerung it goeth up plainly flat.

How these lands doe lye one from the other, and from other lands.

From to Rose-head to Axternes southeast	4 leagues
From Axternes to Vernorden southeast	1 league
From Vernorden to the Heele southsoutheast	1 league
From the Heele to Danske south and by west and southsouthwest	5 leagues
From the Chefts or Wissell of Danske to the Deepe of Quinsbrough eastnorth-east	13 leagues
From the Deepe of Quinsbrough to the point of Brufteroort northwest and by west	4 or 5 leagues

From Brufteroort to the Deepe of Dermemell n.e. and by n.	16 or 17 leagues
From the Rosehead to Quinsbrough deepe southeast and by east	17 leagues
From the Heele to Quinsbrough deepe southeast and by east somewhat southerly	13 leagues
From the Rosehead to Der Memell e.n.e. somewhat easterly	29 leagues
From the Rosehead to Sevenbergen eastnortheast	33 leagues
From the Rosehead to Derwinda northeast	53 leagues
From the Rosehead to Dageroort northeast and by north	80 leagues
From the Rosehead to eastergore, north and by east	45 leagues
From the Rosehead to Houbrough the S. end of Gotland N.	84 leagues
From the Rosehead to the south end of Oeland northwest	33 leagues
From the Rosehead to Hannoe, the course is n.w. and by w.	33 or 40 leagues
From the Quinsbrough Deepe to Houbrough the south end off Gotland north-northwest	40 leagues
From Quinsbrough deepe to Southernorden, the south end of Oeland, north-west somewhat westerly	50 leagues
From Der Memell to Houbrough west N. w. and w. and by N.	37 leagues
From Der Memell to Heylighena north and by east,	4 leagues
From Heylighena to the point of Sevenbergen, north	5 leagues
From Sevenbergen to Der Lyba north and by east	4 or 5 leagues
From Der Lyba to Derwinda N.N.E.	16 or 17 leagues
From der Memell to Brufteroort southsouthwest	16 or 17 leagues
From der Memell to Danske S.w. and S.w. and by w.	32 leagues
From der Memell to Rosehead w.s.w.	29 leagues
From der Memell to the Eartholloms, or the north end of Bronthollom, west and w. and by S.	64 or 65 leagues
From der Memell to Honbrough n.w. somewhat westerly	37 leagues
From Sevenbergen to the Rosehead southwest and by west	33 leagues
From Sevenbergen to Southernorden west, somewhat northerly	40 leagues
From Derwinda to the Rosehead southwest	53 leagues
From Derwinda to Bronthollom westsouthwest	80 leagues
From Derwinda to Houbrough west somewhat southerly	37 leagues
From Derwinda to Eastergore the course is w. and by N.	29 leagues
From Derwinda to the Godtsche sand n.w. and n.w. and by n.	31 or 32 leagues
From Derwinda to Dageroort north	33 leagues

How these Lands doe shew themselves at sea.



The third demonstration,

Where in are described the Seacoastes betwixt Derwinda and the utmost off the East-sea.



He lying of Derwinda, and how men shall know it, is here before declared.

From Derwinda to Leyserorte, the coast lieth n. e. and by north foure leagues, and from Leyserorte, to Domesnes eastnortheast 12 or thirteen leagues. When you are thwart of Leyserorte, you can perceive no point, it seemeth to be al an even right coast from Derwinda to Domesnes, but coming from Derwinda or Domesnes, and being a league or two to the eastwardes or to the westwards off it, you can see well that it is a blunt point, lying out. Thwart of Leyserorte runneth of a great uneven shoulde, at least two leagues into sea, but you need not feare of it, you may runne over it in 4, 5, or 6 fathom by the lead, like as also alongst al the coast off Coerland from Derwinda, untill about Domesnes.

To the westwards of Lyserorte the land hath a little bight, there you may anchor for northeast, eastnortheast and east windes: when it bloweth hard, and that you can do no good with turning to windwards, you must bring the point of Lyserorte eastnortheast from you in 7 fathom, there is clean sand-ground and good lying.

The land betwixt Domesnes and Derwinda is verie good to be know. At the point of Derwinda it is high, and goeth sloping down by little and little to the eastwards unto Lyseroort: Likewise three or four leagues by west Domesnes lieth a high blue hill, called the Doembergh, which is steep on the east side, and goeth by little and little sloping downe to the westwardes unto neare Lyserorte, so that the two high double blue lands do go down into a valleie one against the other,

Lyserorte. other, the low land betwixt both is Lyserorte. The point off Domesnes it selfs is low sandie land, lieth out about three leagues to the eastwardes of the foresaid Doembergh: but all that is altogether full of trees.

Riffe off Oesell Swalverorte. The south end off Oesell lieth from the point of Domesnes N.W. and by W. about 4 leagues asunder, there runneth of a great Riffe, about south and by west, and southsouthwest into sea, towards the shoulde Lyserorte, called Swalverorte, that is a dangerous riffe, at least 3 leagues long, verie hard and uneven, at some places towards Oesell it lieth drye above water, and at som other places it is two and an half and 3 fathome deep. To the westwardes of that riffe lye also manie uneven Dwael-grounds a good wayes of from the land, which lye alongst the coast of Oesell to the northwards, which are at some places not deeper then 2, 3, and 4 fathome.

If you wil goe to Rye, and comming out of the sea doe fall with the land about Derwinda, then leave not the coast of Coerland, but runne about by it upon the lead, all along unto Domesnes in 4, 5, 6, or 7 fathome, according as you have the wind, that you may not fall without, or to the westwardes off that riffe Swalverorte. The channell betwixt Coerland and that foresaide riffe is 14, 15, and 16 fathom, but verie uneven. The ground upon the shoulde thwart of Lyserorte is at some places also very uneven for to sound, sometimes fixe, sometimes eight, and nine fathom, the one cast at least 2 or 3 fathom more or lesse then the other, and that not very farre from the land but you neede not feare off it, you may bouldly runne to the shoare in 4 and 5 fathom.

Marks for to shunne Swalverorte.

But if (when you come out of the sea) you are past Lyserorte, and come with the land to the northwards of it against Oesell, then you have deeper water, for not far, to the westwardes without Swalverorte it is thirtie fathom deep. If you can see Oesell and Coerland, and that the Doembergh be e. f. e. or f. e. and e. from you, then run on f. e. untill you come neare Coerland, for to avoide Swalverorte, and then alongst by it upon your lead towards Domesnes, as is beforefaide. Or when as you have the Doembergh e. f. e. from you, then keepe it so standing from you, and saile in so right with it, and then you shall (without hurte) run alongst over the taile outermost shoulde of Swalverorte, it shoulde up there verie soone and suddenly from 30 or 15 and 9 fathom, but if you bring the east side of the Doembergh not more southerly from you then e. f. e. and f. e. and by e, then you shall noth meet with any danger off the dwaelgrounds, not of Swalverorte, you shall thus saile alongst at least 3 leagues over the Dwael-grounds and Swalverorte, over verie uneven grounds, the one cast at least 12, the other 9, and also wel 7, and 6 fathom, but goe on your course without feare, when as the Inner side, or east side of the south end of Oesell cometh to be N., and N. and by E. from you, then you are over the riffe, within al the foule grounds that might hurt you, when as that you gette then 13 or 14 fathome, then saile bouldly without fear towards Domesnes.

If it should happen, that with a n.w. winde, you should fat with the land to the n.w. wardes of Derwinda, or Lyserorte, and shoulde fear to come neere the coaste of Coerland, then keepe not further of to Sea, then that the E. pointe of Doembergh be e. f. e. from you, when that you bring the east side of the south point of Oesell n.n.e. from you, then you shall run alongst over Swalverorte in 7 fathom. Betwixt Oesell and Coerland it is sixteen and seventene fathom deepe. When as Domesnes is southeast and by east, & the south point of Oesell n. w. and by N. from you, and that you are a like neare to them both there it is 18 fathome deepe.

From the point of Domesnes runneth of also a riffe North-east and by north, or a little more northerly a league and a half into the sea, which is on the east side verie steepe, but on the west side somewhat flatter.

When you come from out of the w., and are bound to Rye you may runne about by it upon your lead, in 5, 6, 7, 8, 9, and 10 fathom, so neare as you wil, but according as the Winde and weather shall be, I know of some that have sounded about it in 4 fathome and a half: but he that will runne so somewhat neare about it must be verie careful in using of his leade, and not let it rest.

Not verie farre from the riffe, on the west side, it is 12 and 13 fathom deepe. When as the point of Domesnes, where the whitered trees stande upon come to be southsouthwest from you, then you come on against the west side of the riffe, when that point is southwest and by south from you, then you are right thwart of the point, but when it is southwest, and S. W. and by West from you, then you are about the riffe, and then you may bouldly goe on southeast towards Rye. Domesnes and the Deep of Rye lye southeast somewhat southerly,

and northwest somewhat northerly, one and twenty leagues distant.

About 8 leagues to the eastwardes or to the southwardes of Domesnes runneth of another riffe from a point which you may sound about in 5 and 6 fathom. The land betwixt Domesnes and that point lieth about S. S. E., and N. N. W., but to the southwardes of it, it falleth a way to the south, so that betwixt this point, and the Deep of Rye, there is a great bay, which is called Kowerwyck: somewhat to the southwardes of this Kowerwyck. pointe in the bay lieth some high land, which lieth from the ke. Deepe of Rye west and by south, and east and by North. It must be verie cleare whether when you can see it, lying at anchor before the deepe of Rye.

When as (comming from Rye) you shall be somewhat to the southwardes in the Koperwike, and come running out there by the shoare, this foresaid point hath thus oftentimes been mistaken for Domesnes, because that then you can see no Land without it, but when as you come about the point, you shall againe see the Land out a head, then you are yet about 8 leagues from Domesnes.

Under the pointe of domesnes you may anchor on both sides, as wel to the w. wards as to the e. wards. If you wil anchor to the w. wards of it, then anchor in 6, 7, or 8 fathom, there you have good sand ground, and sheltered for e. and f. e. windes. If you wil anchor to the e. wards of it, then anchor in 6 or 7 fathom, a little within the point of the land, so that the point be n. or n. and by w. from you, there is good sandie ground, and good lying for a. f. w., w. n. w. and n. n. w. winde: the point of the riffe lieth then from you about northnortheast a league & a half. If you wil anchor further from the shoare, so that the pointe of domesnes be n. w. or northwest and by north from you, there it is 18 and 20 fathom deep soft ground.

If that comming off from Rye against the rif of domesnes, Roade under Domesnes. you will sail about it, then you must runne farre enough about without it, or if you will take it somewhat near, you must be exceeding careful in using your lead. It is (as hath bene said) verie steepe on the east side, with a N. W. waye, (which runneth thwart into the riffe) you shall have the one cast 12, 9, or 8, and the next cast 4, or 3, fathome, if you fall within the point of the riffe. But if you have been at anchor under domesnes, and set saile from thence, and will saile about the riffe, then you may the better runne about it by your lead. Goe from thence n. n. e. and n. e. and by n., that runneth most alongst by the riffe. When the point of Nes commeth about west from you, then it will by little and little somewhat shoulder, you must no spare your lead, but must sound often. With a N. W. course come not nearer it then in 9, 10, or 12 fathom. When the point of Nes cometh to be southwest from you may sound about it so in five, fixe or 7 fathom, then you then come to the east side of the riffe, when that is southwest and by south from you, then you are right thwart of the point of the riffe, but when it is f. f. w. from you, then you are about the riffe, go then W. S. W., or more southerly towards Coerland, and runne alongst by it, in five, fixe, or seven fathom, (according as the winde shall be) toward Luseroot.

If you saile from Rye with an E. or N. E. winde, and shall saile by night about the rif, then set you course so, that you be sure you run farre enough alongst to the N. wards, or without the Riffe, and keepe that course untill that you come neare the grounds of Ambroock or Oesell in 15 or 16 fathom, then you shall be without doubt past the riffe, then goe on a while S. W., untill that you reckon the point of Domesnes to be S. east, or somewhat more easterly from you, then edge up to the coaste of Coerland by your lead, and runne alongst by it, in 4, 5, 6, or 7 fathom, as hath been beforefaide.

East and by north eight leagues from Domesnes lieth the Round. Island Round: you may runne round about it by your lead, in fixe or seven fathom All alongst the southwest side it is al foule & sharp rockie ground, therefore come not nearer to the shoare then in 6 fathome. Southsoutheast about a halfe league from the south point lieth a little plate, where upon it is not deeper then 6 foot, there hath once a man beaten of his ruth. It lieth betwixt the 7 and 8 fathome depth, for to avoide that, take theabouts the sounding of the shoare in five or fixe fathom, and then you run through betwixt it and the shoare, or els, if you keepe in eight or nine fathome, then you runne about without it.

If you will anchor under Round for a Southsouthwest, Road under Round. Southwest, or Westsouthwest Winde, then runne about the Southeast point, untill you come to the East side, there is a little Bay, where stand a few howses with a Chappell, which you can see when you come somewhat neare to the shoare, anchor thwart of it in five fathome, so that the Chappell doe stand

stand S.w. from you, there is the best roade under Round, being clean sandie ground, but when it bloweth hard the sea cometh rouling in. At other places it is not vrye cleane.

The farrewaye betwixt Round and Domesnes is two and twentie and three and twentie fathom deepe, and betwixt Round and Daynemondt three and twentie and four and twentie fathom.

The Deep of the river of Rye From Round to the Deepe of Rye, it is S. S. E., and S. E. and by S. 16 leagues. Before the Deepe of the river Duyn you may anchor in 10 fathome, either to the southwards or the northwards of it, where you please.

The Deep of the river or Rye is Pilots water, as well in sailing up, as sailing off. How men shall saile there in or out it is not possible to describe, so that men might relye upon it for by reason of the continual scouring of the stream, and especiall some extraordinarie great freshets, and strong drifts of yce, the depths and shoulde do there often shift and change, where of everie one that is bound thither may be mindfull of.

Lemsael. From the Deepe of Rye to Parno, the course is n. and by e. 21 leagues, betwixt them both, about twelve leagues from Ryelieth a little towne called Lemsael or Sales, there goeth in a litle deepe of 8 foot water. Before that deepe lieth a bank, which you may saile about on both sides, and come within it, is 3 fathom deep. **Kinne.** The Iland Kyn lieth from Sales northwest, five great leagues: from Round eastnortheast 9 leagues, and from the Deepe of Rye north, about 14 leagues. It is a little low Iland, about 3 leagues long, and hat round about it most foule ground. Betwixt Kyn and the coast of Lyfland it is four leagues broad, and the right deep betwixt them both is eight and nine fathome deepe.

Ambroock. Northwest and by W. 8 leagues from Round, and N. 7 leagues from Domesnes lieth Ambroock, that is a little Iland which is round about foul, with sharpe stonie ground, and lieth a great league distant from the coaste of Oesell. Betwixt Round and Ambroock but nearest Ambroock lye manie uneven **Dwael-grounds.** Dwael-grounds, of 3, 4, and 5 fathom. Ambroock and the S. ende of Oesell lie northeast, somewhat northerly, and south-west somewhat southerly about 7 leagues distant. Under the south point off Oesell on the east side is a good roade for westerlye windes. If you will anchor there, then anchor in 8 or 7 fathome, so that the white Church, which standeth somewhat within the southermost point, doe stand west and by south from you, there is good soft claye ground, and you shall lye sheltred for a west and westsouthwest winde. The ground is there verie even and flatte, whenas you gette the seven fathome, and saile towards to land, it continueth long al one depth of seven fathom, untill you come verie close by the shoare before it will be shoulder.

It is there al alongst by the east coast of Oesell flatte ground of three, four, and 5 fathome.

For to saile from the S. ende of Oesell unto Arentsbergh through within Ambroock, you must leave a thirds of the water on the larboard side towards Oesell, and one third part on the starboard side towards Ambroock, there you shall have about 7 fathom water, and soft clay ground, towards the coast of Oesell it is full of uneven Dwale-grounds, alongst by the w. side of Ambroock you can not lightly take hurte.

Arentsbergh. Arentsbergh lieth from the south ende of Oesell n. e. distant 10 leagues, but from the Iland Ambroock N. W. 4 or 5 leagues. Upon the west side off Oesell, the coast lieth off from the south end unto Hondforte, with divers bay, about north-northwest and southsoutheast 16 leagues, betwixt them both lye 2 lade places. Wyke and Reeck. Alongst this west coast of Oesell lie verie manie uneven and foul grounds, where of men must take verie good heede.

Towre upon Dagerorte. Hondforte, the northwest point of Oesell, and the pointe of Dagerorte lie northnorthwest, and southsoutheast about 8 leagues distant. Betwixt them both is a great have, the runneth also a channel through, but it is so should, that no ships can go through, and al over sharpe and uneven ground. Upon Dagerorte standeth a high towre which the Wor. Counsell of the towne of Revell caused there to be builded, for to knowe the land by, which men may see on both sides of Dagerorte farre into sea, and also may see it over the land ferre in the foresaid baye.

Under the point on the S. hside of Dagerorte is good lying for north and northeast winds & cleane sand ground, you may found about by the point off Dagerorte in seven or eight fathome, on the north side of the pointe is good roade for southerly windes.

From Dagerorte to Syburghnes, the coast lieth northeast seven leagues. Betwixt them both, to were, three leagues from Dagerorte, and four leagues from Syburghnes, lieth a

ground, going flat of thwart from the land northwest into sea, at least 5 or 6 leagues, almost in manner as the greate luttish riffe, is first of 3, 4, 5, 6 and 7 fathom deep, and waxeth deeper by litle and litle towards the Finnish Scheers, where at last it runneth to nothing.

About 3 leagues without the land of Dagerorte, north and north and by east from the high towre, there lieth a suncken rock which is verie steep, whereupon there is no more then tenne foot water: A man of Offaenen hath beaten upon it, which wente no deeper then eleven foote and a half, presently after the stroke he cast the lead, and found five fathom depth. The Towre of Dagerort was then from him south and south and by west.

Syburghnes. Syburghnes is an out point, with two points, from each off which shooteth of a riffe, betwixt these two rifies is a faire flat sand strand, where you may anchor so neere the shoare as you will, in 6, 5, or 4 fathome.

A litle to the westwards of the westermost point off Syburghnes, not farre from the land lieth a shoulde under water, about so great as a shippe, whereupon it is not deeper then twelve foot.

From Syburghnes to Oetgensholm, the course is E. N. E. 7 leagues, betwixt them both goeth in the Moensound. **Oxeholm Grasholm**

To the S. wards of Oetgensholm goeth in a great bay into the land, wherein lieth an Iland, and behinde it a little towne called Hap-sael, there you may anchor where you wil. On the S. W. side of this baye, runneth of a great shoulde or ledge off rocks at least a great league into the sea, which is verie broad, you may runne in alongst by it into Monefound.

From Syburghnes to the Oxeholme and Grasholm, the course is southeast 4 or 5 leagues, the Grasholmes are two litle greene Ilands, and the Oxeholme lieth about a league to the westwards of the Grasholm, about which you may saile, and anchor round about, a litle league north and north and by east from the Oxeholm lieth a ground loose from the land, which you must avoide, called the wester Grashground, there are two shoulde, which are called the Grashgrounds, the other Grashground, which is called the eastermost, lieth over against the Grasholm, towards the riffe of Hap-sael, upon which there is no more then 5 foot water. He that will saile into the Moensound, must take heed thereof.

He that will saile off from Oetgensholme through the Moensound must goe on southsouthwest to the Grasholme, and sail in close by it, for to avoide the Grashground, which lieth to the eastwardes over against it. From the Grasholme to the point of the Oesell, where the great tree standeth upon, the course is southsoutheast seven leagues. From the Grasholm towards Oesell lye 4 litle Ilands, each aboute a league one from the other. **Moensound.**

Whenas you saile from Grasholme towards Oesell, you must sail alongst by these litle Ilands, leaving them lying aboute two or three cables lengths on the starboard side, untill that you come to the land of Oesell over against the great tree. In this farewaye it is 5 fathome deepe.

When as you come sailing so alongst past the Grashground, you shall meete with an Iland on the larboarde side, to the n. wards of it goeth in the Deepe unto the Castle of Moensound in 3 fathome, but sometimes, it is shoulde, for there it is all full of sands. To the S. wards of the same Iland goeth in another Deep which you may saile through until you come to the ende of Oesell, and then you leave the two litle Ilands by the south ende of Oesell, lying on the starboard side. But the right and best Deep, goeth from the foresaid great tree, in alongst by the land Oesell, which is 3 and 4 fathome deepe, and at last it will be 6, 7, and 8 fathom: when you saile alongst there, you leave the foresaid two litle Ilands by the south ende of Oesell lying on the starboarde side. From the greate tree to the first litle Iland, the course is E. S. E. 5 leagues, and then from the first litle Iland to the second southcast, & forth to the ende of Oesell east and by south. **The castle of Moensound.**

From that ende or northeast pointe of Oesell runneth off a foul riffe, a great half league into the sea, called the Paterno-ster which you must avoide. **Paterno-ster.**

From this northeast pointe of Oesell unto Parno, the coast of Lyfland lieth eastsoutheast and westnorthwest.

When you come about that pointe, you may saile into the sea or baye off Rye, where you will, west and by n. to Arentsbergh, S. W. or somewhat westerly to Ambroock, S. S. E. to Round, S. E. and by E. to Kinne, or where you will, the lying off Kiune is described here before.

From Kinne to Magno and Serckholm al alongst unto Parno, the course is northeast 8 leagues. Thwart off Magno and Serckhollom it is betwixt Coerland and the Ilands, five & **Magno Serckholm**

Parno. fixe fathom deep, & alongst Coerland altogether a faire strand. Parno lieth in a great baye, it is there in the roade 3 and 4 fathom deep. For to anchor there you must anchor so tha the steeple of Parno stand n.n.e. from you there is best roade.

Oetgens-holm. Oetgensholme and Syburghnes lye e. and by n., and w. and by s. 7 leagues distant one from the other.

You may saile round aboute Oetgensholme, and also anchor under it, for northerly and N.W. winds in 6 or 7 fathom.

Great Roge. From Oetgensholme to great Roge, the course is east and by north 4 leagues, betwixt them both, a little to the southwardes of she farewaye lieth a shoulde even above water, which you may saile round about, but you may not come verie neare it because it is stonie and rockie round about it. Great Roge is an out point with 2 or 3 white Chalck-hilles, and thereby is verie good to be knowne. Betwixte this point and Oetgensholm, somewhat more southerly lieth another point, called **little Roge.** little Roge, betwixt it and great Roge, goth a broade Sounde in to the land of fixe and seven fathom depth; but in the ende it is shoulde. Thereaboutes it is call cleane ground, and good for to anchor in.

From great Roge to the Iland Nargen, the course is east 5 leagues.

When you sail from great Roge towards Nargen, you shall finde 4 leagues to the eastwards of great Roge an other point with two white chalck pots, called Surp, betwixt it and great Roge, the land falleth awaye to the southwards, into a great baye. If you will saile to Revell, then sail alongst by that point of Surp, towards Nargen, leaving it on the larboard side of you, going on stil east, until you com to the east end of Nargen.

Riffe off the Carels. Being there by it, then goe on east southeast a league and an half, and then you shall come by the end of the riffe, which lieth off from the Blote Karels, come no nearer it then in 6 fathome.

Revel. When as the castle of Revell commeth without the Carels, then sail right unto the head of Revel, untill you come to the east side, let your anchor fall there, and then hall with the fore-ships or stearne, to the head, and make you fast by 4 cables, for the north and N.N.W. windes which blow there flat open in making it a lee shore, so that sometimes with such winds there commeth in a rowling sea.

East about, 4 leagues from the S. ende of Nargen, lieth the Iland the Wolfe, which is aboute a league long.

Revel-stone. Northnorthwest, and northwest and by north two leagues from the westend off the Iland the Wolf, and northeast and northeast and by e. from the north end off Nargen lieth a rock under water called the Revel-stone, although there be no more water upon the three or 4 foot, yet it is in the Summer time with faire wether, oftentimes so smooth water, that it doth not break upon it, and it is also very steep, so that you may not come nearer it by your lead then in 12 fathom. The markes for to knowe the place of this Revel-stone are these: When the N.E. end of Nargen is S.W. and southwest and by west from you, and the high steeple of Revell is capstone barts length, or a little more to the westwards of the west end of the Iland the Wolfe, then you are right thwart of this rock. The steeple of Revell is also then right south from you. But when the steeple of Revel cometh to the Wolfe, and that you are bound the eastwards, and you are surely past this Revel-stone, and a good wayes to the eastward of it.

The wolf. From the west end of the Ilands the Wolfe lieth of a riff to the n. wards in the sea, about an English mile toward the Revel-stone, upon the end of this riff lye 5 or 6 rocks a litle above water. If you come away from Revel on north and by west alongst by the Wolf, the marke the point of Surp, whee that commeth even unto the south end of the Iland Nargen, then you shall also have even the length of the foresaide riffe. If you looke out then on the starboard side, and be not failed very farre alongst to the Westwardes off the Wolf, you shall the foresaid rockes (lying upon the end off the riffe) lye thwart from you, and then you may run to the northwards about by them in 5 fathom without doing amisse.

Showld of Nargen. Betwixt Nargen and the Wolf lieth also a stony shoulde which is very broad, but much neerer. Nargen then the Wolf, and lieth from the S. points or Nargen about N. E., and from the north point east/southeast. Therefore if you bring the south pointe of Nargen about southwest or S. W. and by S., and the foresaid north point westnorthwest from you, and that the Wolf lye then free from the maine land, you shall not misse to fall upon this shoulde.

Nargen. You may saile round about Nargen, and also anchor under it for northerly and westerly winds in ten, twelve, fourteen, and eighteen fathom.

From Nargen to the Iland Wranger, the course is east, 7 leagues. The lying there of you may see in the following.

Of the coast of Finland getwixt the Alands Haffe and Elfenvos.

Betwixt Ure or Bostel on the coast of Sweden, & the Ilands of Aland, goeth in the Alands Haf, which mende call the North-bodem, which lieth up so farre to the northwards into Finland, that a ship with good fresh way should scarce be able to saile to the end of it in 5 dayes: upon the farthest end of this North Bodem lieth the Towne Toren, there Sweden is parted from Finland.

At the outermost rocks of Finland on the Alands-haf lye 3 Ilands, Ercke, Kastelholm & Corpe. Ercke is the westernmost of all, and the outermost, from thence goeth in the Corpe sound, N.E. alongst thwart of Kastelholm and Corpe. Corpe lieth within the other Iland, and from Corpe you may edge over into the Liet of Abbo, which commeth running of from Uttoy: you may also saile up into this channell about behind Lipland, and so come out into the North Bodem.

Uttoy is a great Iland, upon it standeth a great mast with a barrel for a beakon, & lieth from the Iland Gorpe e. and w. about 9 leag. On the w. side of Uttoy goet up the Liet of Abbo, which lieth in first north and north and by east, about 3 or 4 leagues, and then you come on against a great Iland. And then it lieth in alongst that great Iland northeast unto the Sound of Abbo. Abbo lieth at the end of that foresaid great Iland. This Liet runneth up alongst to the eastwards through betwixte the rocks about thirteene leagues, within it lieth a rock under water which is a Magnes or Load-stone, also the ground seemeth to be there of the vertue of the Lode-stone, for when you come thereabouts, the compasses doe not stand, but run and turne without any certain standing still, untill that you be at least a league past it, and then they begin to stand right againe. From thence it lieth e. and e. and by s. alongst through the rocks unto the Rough Iland, to the w. wardes of it runneth the channel of Luys into the sea, when you are thwart of it sea, you may see the land of Revel. It is there betwixte them both, to with, betwixte the Out-rockes and Nargen, or the land thereabouts ten leagues broad.

The Outrocks of Luys, and the channel of Uttoy lye e. & w. about 2 1/2 leagues distant, although it be there betwixt them both all broken land, and full of rocks, yet nevertheles there are no havens nor channels fit for ships to come into.

From Luys alongst without the rocks the channell of Elfenvos, the course is e. and by n. 15 or 16 leagues but Nargen or the Wolf, and the channel off Elfenvos lye n.n.e. and S. S. W. about 16 or 17 leagues asunder.

The Coast of Lyland.

The Iland Wranger lieth from Nargen e. distant 7 or 8 leagues, and 3 leagues E. and by S. from the Wolf.

Under Wranger is on both sides good road and good anchor ground, especially on the S. side, where there is a bay, there you may anchor betwixt the 2 points in 10, 12 or 14 fathom, accordinh as shall be convenient, and lye sheltered for a N. E. and east, and also for a N. West and west winde. You may saile round about Wranger, but from som points (as from the S. pointes, and from the north point) lye off some little risses, whereoff you must take heed, and be carefull in using the lead when you saile about by them.

About an English mile from Wranger lieth little Wranger, a little long small Iland, lying about n. w. and s.e., which is rocky and foul, especially on the n.e. side. From the s.e. point runneth of also rocky riff, whereof you must take heed.

On the S.W. side is good anchoring for N. E. & E. windes, anchor under it, so that the S. E. point lye about E. from you, there is good lying for N.E. and E. windes.

From the northwest point runneth of also a litle riffe which you may sound about in foure, five or six fathom, according as your ship goeth deepe, when as you will goe to anchor there, comming from the northwards, or about to the northwards off the Iland.

About a great league n. from the e. ende of Wranger, and 2 litle leagues n. and by w. from litle Wranger lieth a litle Iland, which by some is called Kuyken, but commonly is called the Koeck-schaer, which is a litle bare rock with a Warder upon it, you may saile round about it on both sides, it lieth from the Wolf n.e. and by e. distant 2 great leagues.

From the Wranger to Eckholme, the course is east/southeast 13 leagues.

Three leagues by west the Eckholms lieth an Out-point, to the eastwards off it a bay, called the Monkwyke, there it is good anchoring for southwest and west winds in eight, ten, or twelve fathom. Betwixt this point off the Monckwyke and Wranger.

Wranger lie 3 litle long Islands, lying alongst the coast of Lyf-land, about a halfe league from the shoare, which are very foule and rocky, and almoſt nothing but rockes, whereof you muſt take heed, otherwiſe the coaſt betwixt them both is clean.

Eckholm. The Iſland Eckholm is clean round about, and lieth about n. w. and ſ. e., it ſheweth it ſelf high at both ends, and in the middeſt with a valley. Under Eckholme is good anchoring at the n. e. ſide for w. & ſ. w. winds in 20, 22, and 25 fathom, and on the ſoutheaſt ſide for eaſterly winds.

Telsburgh Five leagues to the eaſtwards of Eckholme lieth the Caſtle Telsburgh, thwart of it lieth of a ſhould from the ſhoare, but you may ſound it in 8 or 9 fathom. From thence the coaſt lieth alongſt moſt eaſt and by ſouth unto the road of the Narve about 16 leagues, it is altogether cleane without fowle ground, ſo that you may alſo ſail alongſt there by night in 8 or 9 fathom without feare.

Chalk-grounds. Northwards from this coaſt in the fareway betwixt Eckholm and the Iſland of High land lie the Chalck-grounds, Hoſtes, the litle and great Tutters, al of them with very dangerous foule grounds and ſhoulds. Eckholm and High land lye E. N. E. and W. S. W. diſtant about 11, or 12 leagues. About 2 or 3 leagues eaſt and by north, or eaſtnortheaſt from Eckholm, and alſo two leagues from the main land lye the Chalck-grounds, which are foul grounds, almoſt 3 leagues long under water, & ly to the weſtwards w. n. w. into the ſea, and to the eaſtwards almoſt to the riſſe of the Hoſtes. Some ſay that they

are faſt to it, ſo that you ſhould not be able to ſail through betwixt them.

The Hoſtes lieth S. S. W. from High-land about 5 or 6 leagues, which is a long ſmall Iſland foule round about, with two foule riſſes that lie out, the one lieth of ſomewhat to the eaſtwards, & the other to the w. wards unto the Chalck-grounds.

Northwards from the Hoſtes ly the litle Tutters, & 2 leagues to the e. wards of the litle Tutters ly the great Tutters.

The litle Tutters are two Iſlands not high, but round about rocky, rify, and foule, they lie ſouthweſt and ſouth about 3 leagues from High-land.

The great Tutters lye from the litle Tutters eaſt about 2 leagues, and from Highland ſouth and by eaſt alſo two leagues, there lieth of from it alſo a great ſtony riſſe weſtwards toward: the litle Tutters: there lieth alſo betwixt the litle and great Tutters a row of rockes, whereof you muſt take heed when you will ſaile through betwixt them.

Southeaſt and by S. about 2 leagues from the great Tutters lieth a ſhould of 5 fathom. He that will ſaile to the S. wards off theſe foreſaid Iſlands and ſhoulds towardes the Narve, may be mindfull thereof, it lieth about 4 leagues to the eaſtwards of Telsburgh: two or 3 leagues from the ſhore.

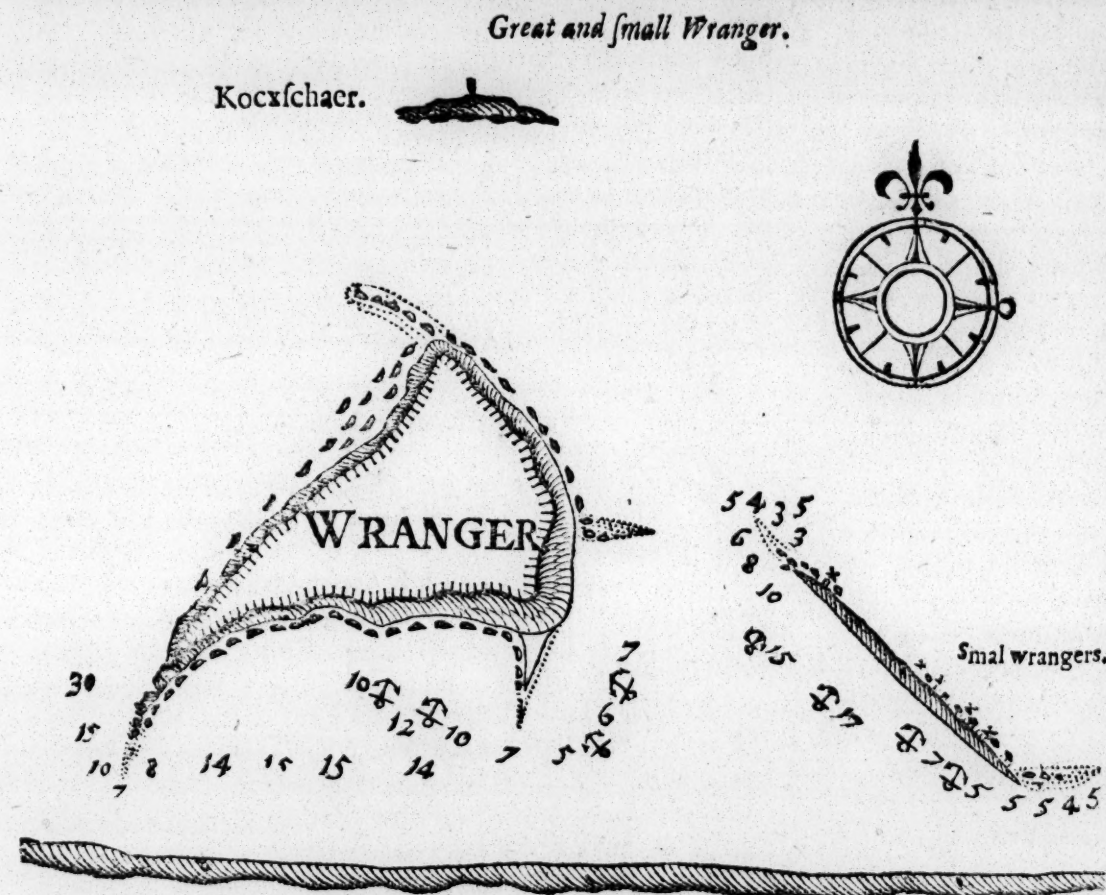
Betwixt the great Tutters and Highland lieth a ſhould up-ſhould, on which there is no more then 6 foot water.

S. E. a great halfe league from the S. end of Highland lieth another ſhould of a fathom & a halfe and 2 fathom deep.

To the northwards off all theſe foreſaid rocky Iſland and foule ſhoulds, lieth a litle Iſland whereupon ſtandeth a Maſt for to know it by, and to diſcerne it from the other litle foule Iſlands, that you may come indifferent near to, but not to neare, for it is alſo ſomewhat rocky and foule, but not farre of, it lieth from the litle Tutters W. and by north about 2 leagues, from the Iſland Highland ſouthweſt and by w. at leaſt 4 leagues, but from Wranger or the Kockſchaer eaſt and by N. 20 leagues.

He that will ſaile off from Wranger towardes the Narve alongſt to the northwards of theſe foreſaid grounds, and doe get ſight of this litle Iſland with the maſt, may thereby the better know to direct his courſe, but is not wiſdome to ſail through theſe foreſaid ſhoulds, except for them that are very well acquainted.

The Iſland Highland or Hogh-land, is about 3 leagues long, and not a league broad, lying S. S. E. land.



& n. n. w. when you come out of the weſt, it ariſeth in 3 hommocks, ſo high to looke to as Coll in the Sea wreack, upon the N. end and upon the E. ſide it doth ſtand al ful of trees. A litle about the N. point on the E. ſide is a litle bay thwart of a Boers houſe, there it is clean ground and good lying for weſterly and ſouthweſt winds, ſomewhat to the ſouthwards of it, not very far from the ſhore, lieth a great rock above water. At the N. end is alſo good lying for a S. E. wind. Alongſt the S. W. ſide you may alſo anchor every where in 16, 17, or 18 fathom, cloſe by the land for E. & N. E. winds.

From the ſouthweſt ſide of Highland unto the road of the Narve, the courſe is ſoutheaſt about 16 leagues, and then you run through betwixt the Highland and the Tutters.

Likewiſe when as you ſaile on northweſt from the roade of the Narve, then you run alongſt betwixt the Tutters & Highland, but you muſt be very carefull, and take heed of the foreſaid ſhoulds, which ly betwixt them both.

The land of the Narve men do know by 3 high hills, lying a league to the weſtwards, or to the ſouthwards of the road, and a league further to the weſtwards ſtand ſome litle houſes upon the high land.

The Narve. The towne of the Narve lieth upon a river about two leagues within the land. For to ſaile in there men were wont to loock out for a long hill, which lieth on the ſouth ſide within the rivers mouth, and at the eaſt end goeth downe ſomewhat ſteep, with ſome high trees to the eaſtwards of it, then they brought the wooden tower off the Narve to the northwards of the foreſaid trees, and did run in ſo with it. When as the eaſtermoſt of the 3 foreſaid hills (a league to the Weſtwards of

the rivers mouth) come over a litle hommocke, which lieth on the water ſide, then they where upon the barre of the rivers mouth, there was upon the ſhouldeſt ten foot water, and then they ſaile up the river, that was wont (for ſome years) to be ſo, but it is poſſible ſince that time more or leſſe altered, like as it doth oftentimes happen in ſuch rivers.

From the road of the Narve to the Ruſſe-haeck, the courſe is N. N. W. five leagues, which lye with many rockes a good wayes of from the ſhore. The point thwart of it is called the point of Caſtrum after a litle town (ſo called) lying there.

From the Ruſſe-haecks n. n. w. 5 league lieth a litle Iſland, called Rette Sarre, from which there runneth of a riſ S. into ſea. From this Iſland, or a league to the w. wards of it unto the Summers, the courſe is S. and N. 4 or 5 leagues.

Eaſtſoutheaſt from Highland, and 3 leagues from the Ruſſe haecks lieth another ſhould, called the Slimme-grounds, it lye long and ſmall alongſt n. n. w. and ſouthſoutheaſt, with hard wind you may ſee it breack in 4 or 5 places: when it is Weſt from you about halfe a league, there it is two fathom deep to 3, 4, 5, and 6 fathom uneven ground, ſome off the rockes of it lye alſo above water.

From the Ruſſe-haecks to the Rode-hell, the courſe is N. Eaſt about 24 leagues, betwixt them both on the Ruſſe ſide, runne alſo divers rivers into the land, but there it no trade. The land there lieth in a great bight, it lieth firſt from the Ruſſe-haecks unto the River of Nioa, or Oraſchacke E. N. E. about 13 leagues, the parteth Ruſland from Finland by a great Meer, or water called the Lading.

The ſtrong caſtle of Noetenburg lieth there alſo upon a river

ver which lieth out of the Lyflands or east sea into the foresaid de Lading. Further the land lieth n.n.e. and n. and by w. about 13 leagues unto the Rode-hell.

For to sayle from the Revell to Wyburgh.

From a litle to then. wardes of the Kockschaer to Higland, the course is E. and by N. a litle more easterly 23 leagues, with that course you runne alongst a litle to the N. wardes of it. You may saile about Highland on both sides, but alongst to the n. wardes of it is the right fare-way for these that are bound to Wybrough. A halfe league N. and by W. from Highland lieth a suncken rock under water. For to avoid it you must saile alongst by Highland. Further the lying of Highland hath been described here before.

Summers. From Highland to the Summers, the course is e. and by n. 7 leagues. Summers is a rock or little land almost like the Eartholms, it sheweth it selfe in 3 hommocks. A litle to the eastwards of it lye some rocks above water: you may saile about on both sides of Summers, and also throug betwixt Summers & the foresaide rocks that lye to the e. wardes of it: but about to the n. wardes of it is the right fareway, you can not also runne alongst farre to the n. wardes of it, for a halfe league to the n. wardes of it, it is very foule and full of little rocks, some above and some under water.

Goefchaer off greates Fisher. From the Summers to the Goefchaer, the course is e. n. e. 7 leagues. The Goefchaer which by some is called the great Fisher is a long and broken land of seven rocks, therefore it is also called the Seven-rocks, it lieth not far from the land, so that you can not get sight of it, before that you come nearer it, it sheweth it selfe when you shall first see it, in 4 hommocks, as if it were 4 litle low lands, you must leave it lying a halfe league on the larboard side, for to avoid a suncken rock which lieth of from it S. S. E. a great shot of a cast peece. When the water is not very smooth, but a litle grown, you may perceive it by the breaking of the water: you may also wel saile to the northwardes of this suncken rock, to wit, through betwixt the suncken rock and the Goefchaer, then you must run indifferent close alongst by Goefchaer, when it is n. w. and by north from you, then you are past the foresaide suncken rock, whether that you run alongst to the northwardes or to the southwardes of it.

litle Fisher From the Goefchaer or great Fisher to the litle Fisher, the course is northeast and by east 3 leagues. The litle Fisher is a bare round rock which lieth not farre from the land: when you come neere it, you may know it wel from the other rocks, because there lye none farre from the land alone, you may saile about in both sides, but alongst to the S. wardes of it is the right fareway. About a shot of a cast peece southeast or southeast and by east from this litle Fisher, lieth a black rock with the top even above water, almost like a buye upon the Flye-streame, to see to a farre of as if it were a Seales head. This rock you must leave on the starboard side, and run through betwixt it and the Fisher.

He that must turne to windwards hereabouts, let him not come very neer this rock, for men doe hold that there lie more rockes by it under water.

Both the Fishers are otherwise clean round about, so that you may also finde road under them.

Corfnes. From the litle Fisher to the point Corfnes, which the Lubickers doe call Kruyfoort, the course is e. n. e. somewhat easterly a league. Corfnes is a point going of low of the maine land, not very clean, which you must leave on the larboard side. To the w. wardes of Corfnes lye 2 litle lands close to the land. Thwart of the point lieth a rock almost like a litle boat, you may runne about by it in 4 fathom and a halfe, but nearer. On the east side of that point you may anchor for Westerly winds in 5 or 6 fathom.

About 2 leagues thwart of from Corfnes, lye very many rocks, some one fathom, some a halfe fathom, some more, and some lesse under water, you may not goe out of the fareway without great feare and danger. It is impossible to describe all the uneven grounds, the great multitude of rocks and rocky shoulds which are lying thereabouts.

From Corfnes to the land Rodehell, the course is n. e. and by n. about 3 leagues. Rodehell is a greates rough land with a saddle in the midst, which you must leave lying on the starboard side. The north point is a red point, there stand up long staves over end, like unto a Warder in Norway, you must goe close alongst by them, or you may run in amidst the channell, according as shal be best convenient, but you not goe close by the north point over against it (which the Dutch shippers doe call Ian Lambertsons point) because of a stony and steepe litle riff which lieth of from it, but you may runne about by it

upon your lead in seven or 8 fathom, but may come nearer the right fareway betwixt them both is fourteen and fifteen fathom deepe.

Betwixt the point of Corfnes and the Rode-hell, it is not without danger to turn to windwards, especially you must be very carefull not to run to far over to the Soutwards, but to the Northwards, towards the maine Land, it is indifferent cleane: It is there in the fareway fifteen fathome deepe, loit clay ground.

For not to misse this foresaid channell, or to the n. point off the Rodehell, then take marck out a stearne of the litle Fisher, bring that even without the point of Corfnes, and keep it so standing sailing towards the Rodehell, and so you shall not faile to fall right before the channell. This is a sure marck where upon you may trust. If you fall somewhat to the S. wardes of the foresaid channell, you can see opening, but seemeth to be all whole to the maine land, so that men (that are not wel acquainted) might not know were to seek the channel, but sailing to the northwards, the channell doth open it self.

When as you shal be then within the foresaid point of Rodehell, you may anchor there where you please, and fetch a Pilot from the land, which may bringh you up to the towne Wybrough. It is there within in fifteen fathom deep, and good loit clay ground.

If you will (being come within the Rode-hell) saile up to Wybrough, then goe on east and by south a shot of a cast peece unto a black point, leave that about two cables lengths on the larboard side, for there it is not cleane. Being a litle past this black point, then go on N. E., on eastnortheast a halfe league, and then you shall come against a graet white sand-bay, but before you come by this sand-bay, you shall meet a rock with a gray stone like a buye upon the Flystream, leave that foresaid rock on the starboard side, and the Gray-stone on the larboard side, and runne amidst the channel through betwixt them both, there it is three fathom deep. It is wisdom to saile up there for him that hath not bene there before, but it is bett to anchor a litle within Rode-hell, and to let him be brought up by a Pylot.

The Coast of Finland betwixt Elfenvos, and Wybrough.

The Channell of Elfenvos lieth from Nargen or the Wolfe N. N. W. and S. S. E. about 16 or 17 leagues from Wraunger south and north.

Upon the west side off the channel lieth a high round rock, Rubben, whereupon standeth a mast, or Warder, called Kubben, over against upon the other side of the channell lieth a long rocke or land called Sautum, and an halfe league to the eastwardes of Kubben lieth another great round rock called Mely. These three rockes are the best marckes to be known of this foresaid Channell.

Betwixt Kubben and Sautum lieth that Channell in from thence northeast untill that you be within the rocks, and then northnortheast and by east, untill you come before the river of Elfenvos, there you may anchor betwixt the rockes in good anchor ground.

There runneth also a Liet through within the rocks, where you may saile alongst, and come out againe into the sea by Puttagre, this runneth aboute very crooked with many bights, but it is Pilots water.

If you will saile to Borgo, then runne a league to the Eastwardes of the foresaid rock Mely, there you shall finde two high bare rocks, called the Tolcken, runne in betwixt them both, but neere to the eastermost, which is cleane and cleare close to it, and lieth somewhat further to seawardes then the westermost. W. N. W. from this eastermost high rocke, lieth a litle Rocke above water, leave that on the larboard side. When as then you shall be by this eastermost rock, which you leave lying on the starboard side of you, then goe on northnortheast to Schoeland, that is a rough land of from which lye many bare points, all which you must leave (with the land also) on the starboard side, then run alongst close by these bare points. When you are past them, goe then northeast and by north, somewhat easterly, and so you shall see two other bare rockes, the eastermost of the Greatnesse off a shippe very steepe and high, but the westermost is small, run in there betwixt them: the Sound is called Cramer-poort. When you are within them, goe then in north and by east, and then you shall presently poort. meet with a greates land called Cramer, leave that on the starboard side, and so you runne right on with an other greates land, called the Hester, leave that on the larboard side, and anchor betwixt the two lands Cramer and the Hester, there is good anchor ground.

From the mouth of the Sound of Elfenvos to Peltingsound, the

the courſe is eaſt, and eaſt and by ſouth, 11 or 12 leagues. Peltingſound lieth in northeaſt, there you lie within a great many great rockes, or litle Ilands, ſheltred for all windes. You may ſaile from thence through within the rocks al over where you deſire to be, of you have a good ſkilfull Pilot.

From Peltingſchares to Putſfagre it is five leagues. Putſfagre is a great Rock, or Iland, lying from Highland north-northweſt diſtant five or ſixe leagues. About a league ſouth from this Iland Putſfagre lieth a ſuncken Rock, which you muſt avoid. He that will ſaile through within the rocks, let him take a Pilot from Putſfagre, that may bring him through the rockes where he deſireth to be: You may run in there every where, and within the rockes it is moſt all over good anchor-ground.

From Putſfagre to the Epelſchares, the courſe is eaſt, 7 leagues: theſe are a great many out rockes, a litle to the eaſtwards of them lieth a great rocke called Quadſchare which you may ſaile round about.

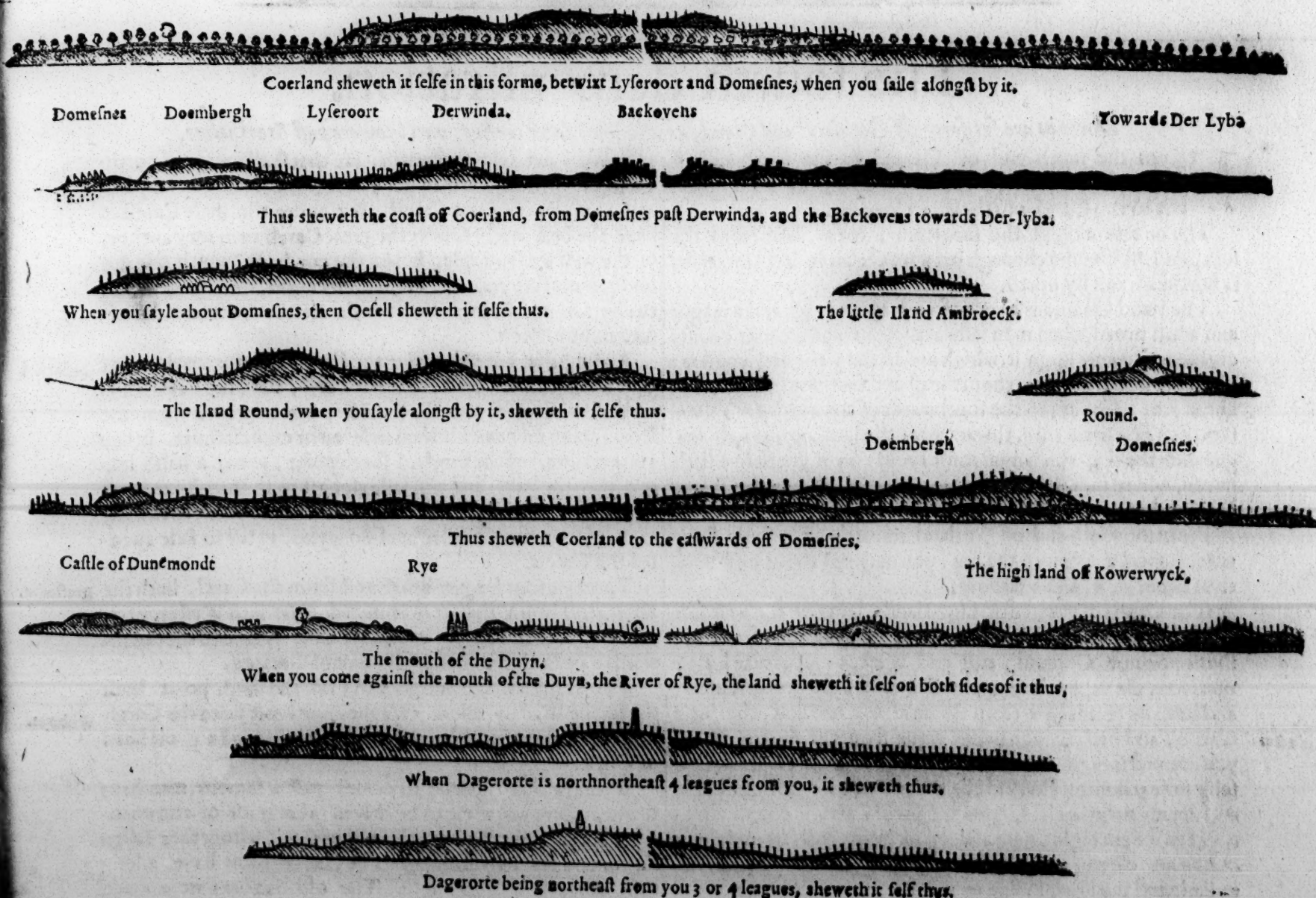
From Epelſcharen to the Goelſchare, the courſe is eaſt 10 leagues. That and the lying of the land, and dangers from thence eaſtward, hath beene deſcribed here before.

How theſe lands doe lye one from the other, and from other lands.

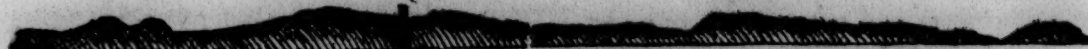
From Derwinda to Luſeroorte northeaſt and by N.	4 leagues
From Luſeroorte to Domeſnes eaſtnortheaſt	11 or 13 leagues
From Domeſnes to Round E. and by N. ſomewhat eaſterly	8 leagues
From Round to Duynemondt or the mouth of the river of Rye ſouthſoutheaſt	16 leagues
From Domeſnes to Rye or Duynemond ſoutheaſt	21 leagues
From Duynemond to Lemſael or Sales N. N. E.	12 leagues
From Duynemond, or the mouth of the river Rye to the Iland Kin north and by weſt	13 or 14 leagues
From Round to the Iland Kinne eaſt and by north	10 leagues
From Domeſnes to the ſouth ende, or the rode of Oeſell N. W.	3 great leagues
From Domeſnes to Ambroek N. N. E.	5 leagues
From Round to Ambroek northweſt and by N.	8 leagues
From the ſouth ende off Oeſell to Arentsbergh N. E.	10 leagues
From Luſeroorte to Houbrugh w. and by ſ. ſomewhat ſoutherly	40 leagues
From Luſeroorte to the point of Alant of the Ilands N. N. W.	59 leagues
From the ſouth poynſe of Oeſell to Hondſorte northnorthweſt and north and by weſt	16 leagues
From Hondſorte to the poynſe of Dagerorte N. N. W.	8 leagues
From Dagerorte to Syburghnes eaſt and by north	7 leagues
From Syburghnes to the Oxeholme and Graſholme N. E.	4 or 5 leagues
From the Graſholme to the great Tree upon the ſoutheaſt	8 leagues
From the northeaſtpoint off Oeſell to Parno E. and by S. about	16 leagues
From Arentsbergh to the N. E. point off Oeſell E. and by S.	8 or 9 leagues
From Ambroek to the northeaſt point off Oeſell northeaſt ſomewhat eaſterly	9 or 10 leagues
From Round to the N. E. end of Oeſell north, ſomewhat weſterly	13 leagues
From Lemſael to Parno northnortheaſt	9 leagues

From Dagerorte to the Roſthead ſouthweſt and by ſouth	30 leagues
From Dagerorte to Eaſtergore ſouthweſt and by weſt	37 leagues
From Dagerorte to the Godſche land weſt and by ſouth	27 leagues
From Dagerorte to Boelſchaeſer weſtnortheaſt	21 leagues
From Dagerorte to the point off Alant or the Ilands northweſt and by north	20 leagues
From Syburghnes to Oetgenſ holm eaſt and by north	7 leagues
From Oetgenſ holm to greaſe Rode eaſt and by N.	4 leagues
From greaſe Rode to Surp eaſt	4 leagues
From Rode to Nargen eaſt	5 leagues
From the ſouth ende off Nargen to the Iland the Wolfe, eaſt and eaſt and by N.	4 leagues
From Revel to the Wolfe north	5 leagues
From Oetgenſ holme to the outrockes of Luys N. and by E.	15 or 16 leagues
From Syburghnes to the channell off Abbo, or Uttoy N. W.	20 leagues
From Uttoy or Abbo to the channell off Luys, the courſe is eaſt	21 leagues
From Luys to the channell off Elſenvos E. and E. and by N.	15 or 16 leagues
From Nargen to the channell off Abbo the courſe is W. N. W.	32 or 33 leagues
From Nargen or the Wolfe to the channell off Elſenvos northeaſt and by N.	16 leagues
From Nargen the outrockes off Luys N. W. and by N.	13 leagues
From the VVolve to Peltingſchares N. E. ſomewhat eaſterly, or N. E. and by E.	20 leagues
From the channell off Abbo to Boelſchaeſer S. W. and by S.	16 leagues
From the Iland the VVolve to VVrager eaſt and by ſouth	3 leagues
From the VVolve to the Kockſchaeſer eaſt and by north	5 leagues
From the Kockſchaeſer to the eaſt ende off Wranger, ſouth and by eaſt	1 league
From the Kockſchaeſer to litle Wranger ſouthſoutheaſt	2 leagues
From Wranger to Eekholm eaſt and eaſt and by ſouth	13 leagues
From Eekholm to the Cattle off Telſburgh eaſtſoutheaſt	5 leagues
From Telſburgh to the rode off the Narve eaſtſoutheaſt	16 leagues
From the rode off the Narve to the Ruſſehaacks N. and by W.	5 leagues
From the Ruſſehaacks to the River Nioa, or Oeſchalck, E. N. E.	13 or 14 leagues
From Oeſchalck to the Rode-hell north and by eaſt	15 or 16 leagues
From the Ruſſehaacks to the Rodehell N. E. and by N.	27 leagues
From Ruſſehaacks to the Iland Rette Sarre north	5 leagues
From Rette Sarre to Sommers N. N. W.	4 or 5 leagues
From Eekholme to the Iland Highland eaſtnortheaſt	11 or 12 leagues
From the weſt ſide off Highland to the rode off the Narve ſoutheaſt and by ſouth	16 leagues
From Highland to the litle Tutterſ ſouth	3 leagues
From Highland to the great Tutterſ ſouth	3 leagues
From the Iland with the Maſt to the litle Tutterſ eaſt and by ſouth	3 leagues
From the Kockſchaeſer to the Iland with the maſt E. and by ſouth	16 leagues
From the Iland with the maſt to the Highland N. E. and by eaſt	4 leagues
From the Kockſchaeſer to Highland eaſt	23 leagues
From Highland to the Sommers eaſt	7 leagues
From the Sommers to the Goelſchaeſer or great Fiſher, northeaſt ſomewhat eaſterly	7 leagues
From the graet Fiſher to the litle Fiſher N. E. and by eaſt	3 leagues
From the litle fiſher to the Corſnes E. N. E. ſomewhat eaſterly	1 league
From Corſnes to the Rode-hell N. E. and by N.	3 leagues
From the ſound off Elſenvos to Peltingſound eaſtſoutheaſt	11 or 12 leagues
From Peltingſound to Putſfagre eaſt	5 leagues
From Putſfagre to the Epelſchaeſer eaſt	7 leagues
From the Epelſchaeſer to the Goelſchaeſer or great Fiſher, eaſt	10 leagues
From Eekholm to Elſenvos N. W. and by N.	16 leagues
From Highland to Peltingſchares N. W. and by weſt	8 leagues
From Highland to Putſfagre N. N. W.	7 leagues

How theſe Lands doe ſhew themſelves at Sea.



The Sea-coasts between Derwinda, and the uttermost off the East-sea.



In this forme appeareth Dageror, when the towre is east and by S., and the northermost point is E. from you 4 leagues, and then you may even see it in clear weather from below.

When as the towre upon Dagerorte is E. and by S. and the land to the eastwards of it is E. 4 leagues from you, then it sheweth it selfe thus: Syburghnes.



When the towre of Dagerorte is E. from you, then it sheweth it selfe (with the land to the westwards of it) thus: Syburghnes. Dagerorte.



High hill



Thus sheweth the land of Dagerort towards Syburghnes.



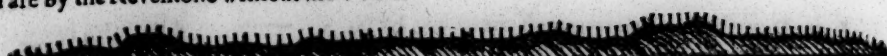
Thus sheweth Syburghnes when the high hill is E. 4 leagues from you. there it is 35 and 36 fathom deep.



Thus sheweth Revell when you are by the Revelstone without the VVolf.



The forme of Oetgens holme.
N. w. point.



The Island Wranger sheweth thus, when it is E. and by E. 3 leagues from you.
S. E. point.

Midland.



Thus sheweth Eckholm, when you come from the westwards, and that it lyeth eastwards from you.
S. east point.

North west point.



Thus sheweth Eckholme, when you come from the eastwards, and that it is to the westwards from you.

In this forme sheweth the Island the Hufes, when you are to the southwards of it, and saile alongst by the coast of Lyfland.

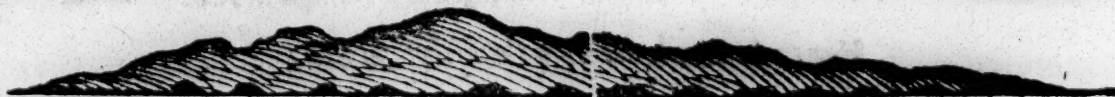
The little Tutters shew themselves thus, when the lye to the northwards from you.



Thus sheweth the land to the eastwards of the Narve, when you comethereabouts, coming off from the Highland.

Thus sheweth the great Tutters, when you saile alongst by the coast of Lyfland, and that they lye to the northwards from you.

In this forme sheweth the land to the eastwards of the Naree, when you come off from the Highland.



Thus sheweth the Island High-land, when you see it coming from the westwards.

The fourth demonstration.

Where in are set forth off Gothland and Oland, as also Swet-land coastes, untill you are past Stockholme.

From the south-end of Oeland to the south-end off Gothland, the course is eastnortheast 23 or 24 leagues, but to the Carels northeast 27 leagues.

The course alongst the farewaye, for to saile from the south end off Oeland through betwixt Oelandt and Gotlandt, is northeast and by north.

The Island Oeland is twenty four leagues long, and a league and a half broad, when men saile alongst by it, they may counte eightene towers upon it, which are all flat: the east coast is a cleane coast, and lieth northnortheast and southsouthwest, but about 7 or 8 leagues to the southwards of the north end, there shooteth of a little riffe, thwart from the land a great half league into the sea, which men must avoid: by it goeth in a little haven, where indifferent ships may goe in, otherwise Oeland hath no havens.

From the south end off Gotland runneth off a foule stony riffe, a good wayes into the sea, you may run about by it upon the lead in 7, 8, and 9 fathom.

The great Carell.

Little Carell

The Carels are two little high Islands, lying on the west side of Gotland north end by west about seven leagues from the south point off Gotland, east and West, about a halfe league one from the other, the greatest is called the greates Carell, and lieth a great league from the land: the smallest, the little Carell, and lieth about a halfe league from the shoare. When you come from the southwards, the greates Carell sheweth it selfe in two hommocks, and the little Carell in one hommock, and neere to the land. Under the little Carell is round about good roade, in eight, nine and ten fathom, and is round about cleane and cleare, without foule grounds. Men doe anchor betwixt it and the land, in sixe or seven fathom, there it is good lying for all windes, as well for them that are bound to the

eastwardes, as to the westwards. He that shall be to the northwards of Gotland, and shall get a countrarie wind, you may also anckor under the great Carell, but under the little Carell is farre the best roade. Under the great Carell men may anckor, on the west and east side, but on the north and south side it is foule, therefore come no nerner it by night, then in eleven or twelve fathom. Betwixt the two Carels it is thirteen and fourteen fathom deep.

About halfe wayes betwixt the Carels and the south end of Gotland, southsoutheast from the Carell, lieth the haven Boswyke: thwart of it runneth off a riffe, a good wayes from the shoar, come no nerner it then in seven or eight fathom. When you are thwart of the foresaid south point, about a halfe league from the land, and will saile alongst to the northwards off Gotland, you must not sail on more northerly then northwest, as well for to avoid that riffe of Boswyke, as for to saile awearer the Carels.

Three or four leagues northwest from the Carell, lieth the Island Reefholm, thwart of it men doe run into Westergorte: you may saile and anckor round about it. A litle to the northwards of it lieth the northwest point of Gotland.

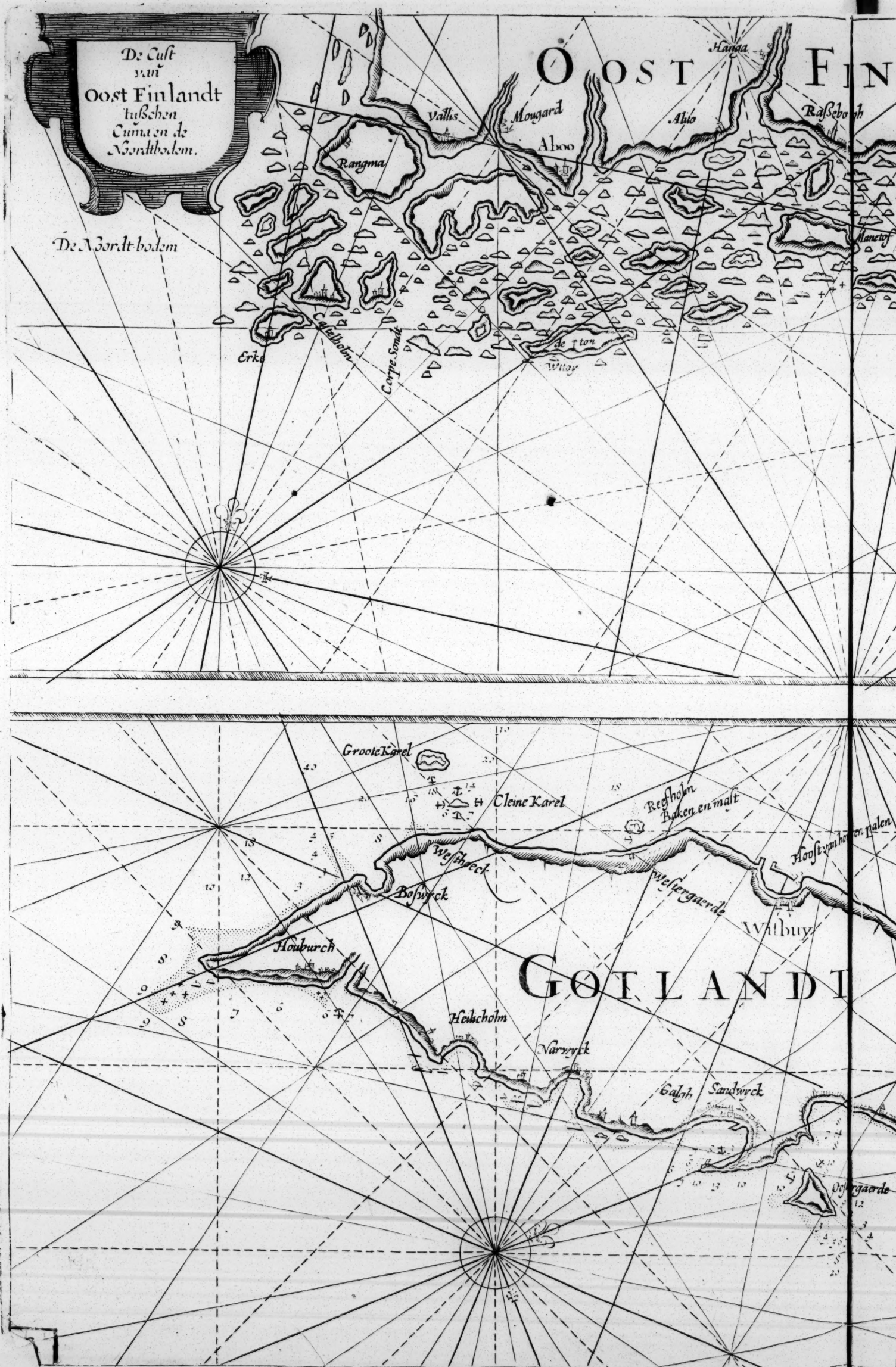
Two leagues to the northwardes off the high point lieth the towne Wisbuy, about 7 leagues northeast from the Carell. Men were wonte in old tyme to lye there behind a great head or Chest.

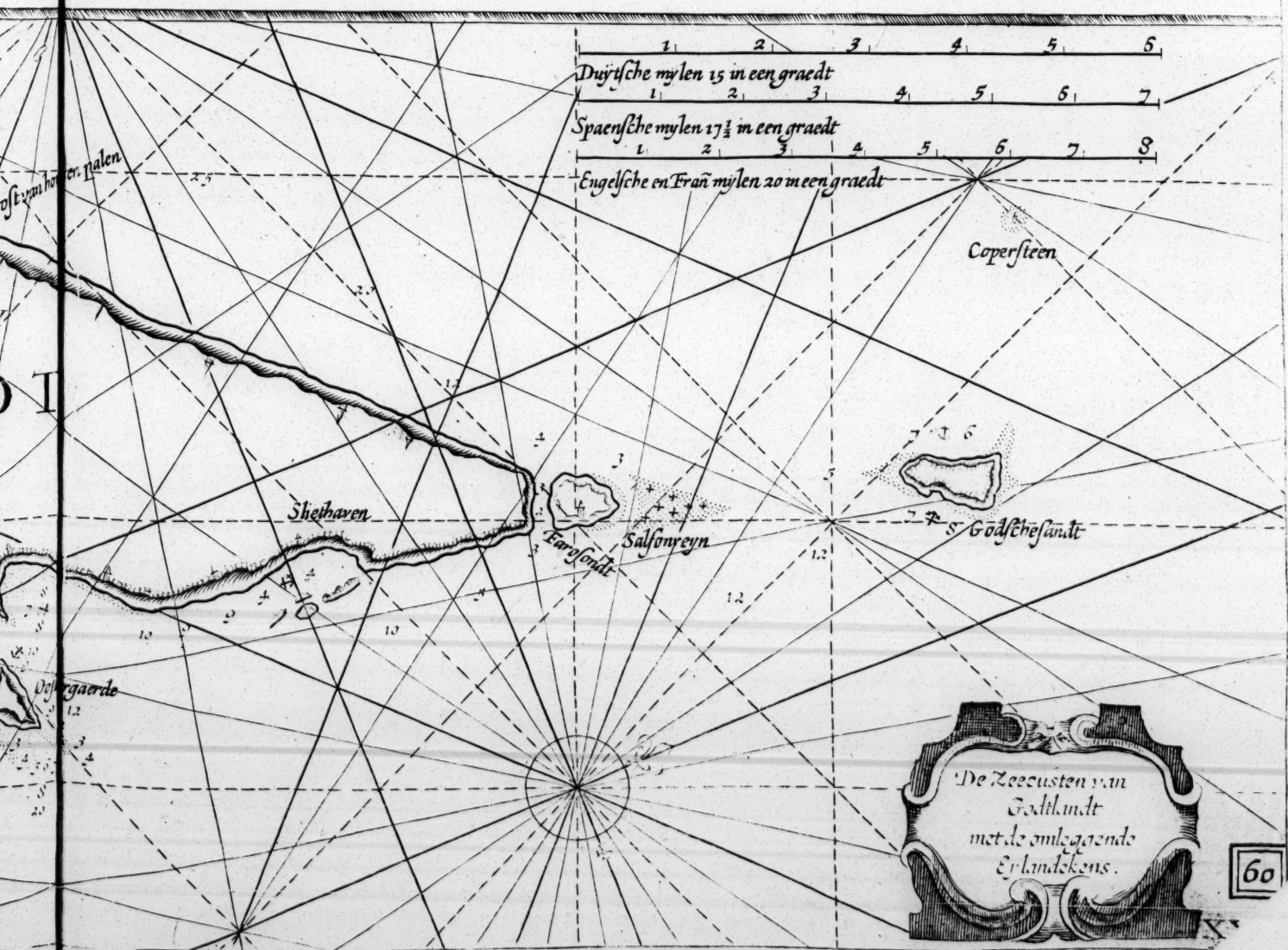
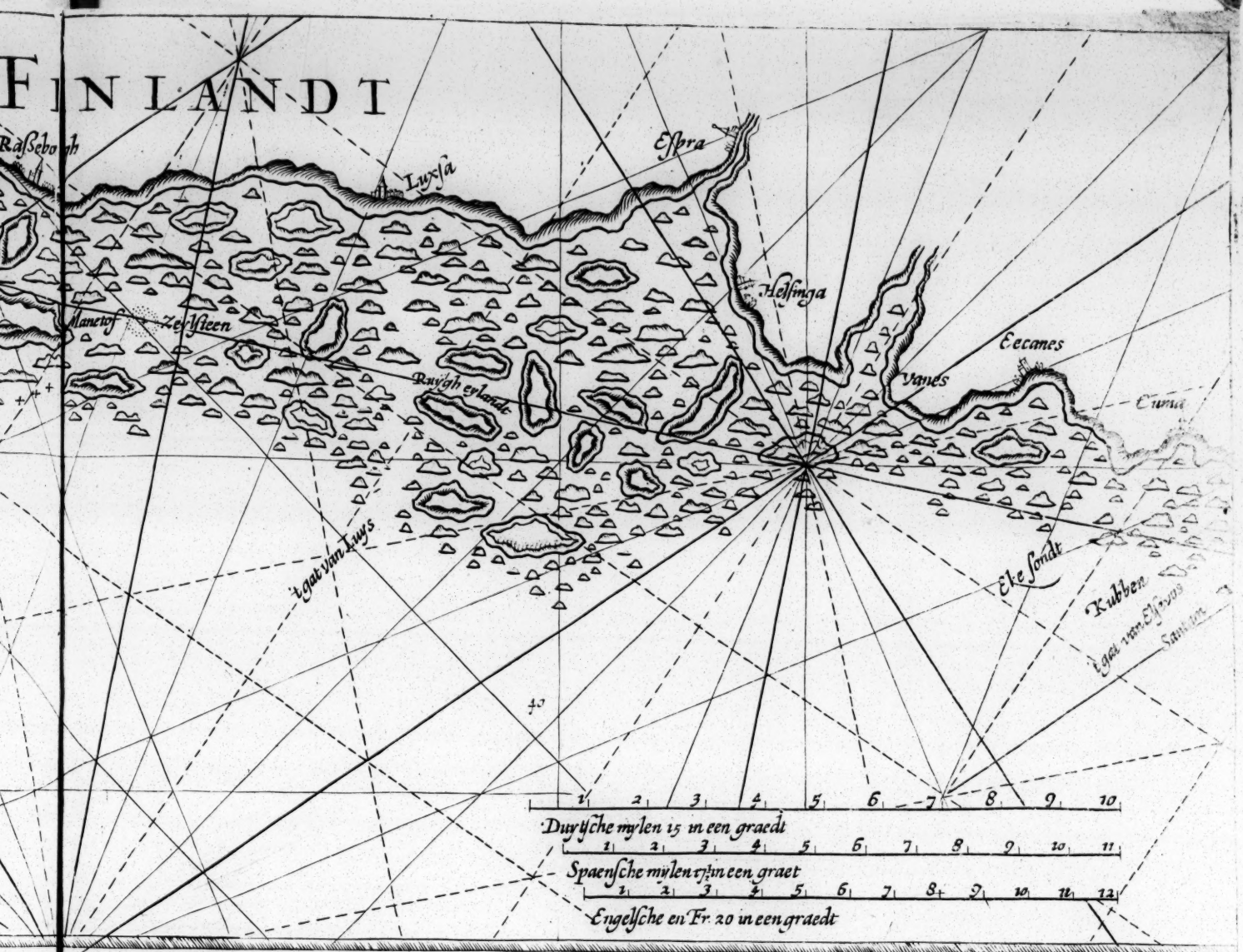
Wisbuye hath beene in tymes past a famous marchant towne, where was wont to be driven great trade of marchandize, but it is now through the will of God, altogether fallen down, and come to nothing. The Hance towns have a long time there held their staple. The old Sea laws were made there, and also the old famous Read-carde. Men may see yet to

tykel

holm.

nye.







De Cysten van Sweden
tusschen Calmar en
Landsort
t'gat van Stocholm.

1 2 3 4 5 6
Dutchse mylen 15 in een graadt
1 2 3 4 5 6 7
Spaanse mylen 17 1/2 in een Graadt
1 2 3 4 5 6 7 8
Eng en Fr mylen 20 in een Graadt

Stocholm



otlant

Duytſche mylen 15 in een Graat
Spaanſche mylen 17 1/2 in een Graat
Engelſche en Fr. mylen 20 in een Graat

to this day many old ruirous houses of costlu marble and new stone, whereby men may partly perceive and judge, what manner or stalteneffe there hath been.

From Wisbuy the coast lieth forth n. e. towards the end of Gotland about 9 leagues. But from the Carell to Gotsche sand the course is n. e. 2 1 leagues: there is a little Island, whereupon dwelleth no people, and standeth ful of trees: You may saile round about it, which hath a white strand. From the n. w. point thereof shooteth of a litle riff, and likewise one from the south point, a good wayes of into sea, towards the N. end of Gotland. On every side of Gotsche sand, you may ankor in 6, 7, 8, 9, 10 and 12 fathom all clean and good ankor ground, but these foresaid riffes you must avoide. It lieth n. n. e. 7 leagues distant from Faro, the N. end of Gotland, when you lie there under it at ankor, you kan not see Gotland.

The Copperstone lieth from Gotsche sand W. N. W. and N. W. and by W. distant 3 great leagues.

Upon the S. end of the E. side of Gotland standeth a high tower, called Houbrough, and thereafter the S. end of Gotland also is called Houbrough. By it goeth in a litle river, before which you may ankor in 6 or 7 fathom.

Five leagues N. East from the foresaid South point lieth Heyligh-holm, which is a good haven, but by reason it is but litle used, it is therefore also but litle known.

Two leagues to the eastwards of Heyligh-holme lieth the haven of Narwyck, upon the east side of the haven lieth a long rock, by which you must run in, and leave another sharp rock on the larboard side, within the haven you may ankor in 4 or 5 fathom.

Two leagues to the eastwards of it lieth Sandwyk which is a good haven for a west, northwest, north, east, and southeast winde, and lieth in about north, a south winde bloweth there open in: On the east point, (which is a low bare point) lieth a Aolme, which is fast to the land, upon it standeth a Warder: From this point runneth of a litle sand-riffe, which you may found about in 5 or 6 fathom. Within at this Holm is a bridge of Mafts which lieth of a litle from the shoare. If you wil ankor there in the haven, then run in alongst by the east shoar, untill you come within the bridge, and ankor there nearest the east shoare, so that the foresaid east point do stand southeast, or Southeast and by South from you, in 4 fathom, 4 and a halfe, or 5 fathom, there is cleane clay sandground, and very good lying for west, north and east windes.

Eastergore A league to the e. wards of Sandwyk, lieth the Island of Eastergore, about halfe waies betwixt both the ends of Gotland n. e. from the S. w. point, this is a bare Island, without trees. Under this Island is very good road for all windes, as wel for them that are bound to the e. wards, as to the w. wards. Comming from the w. wards, or from Sandwyke alongst by the land, then is the n. w. point, (which is a high bare gray point) hidden behinde a point of the maine land of Gotland, so that it semeth a far of to be no Island, but comming near it, it openeth it self, that you may see large enough thorow betwixt them: saile in there betwixt them both, in the midst of the channel, it is there claen and clear, but somewhat uneven of ground, to wit, 8, 10, 12, & 14 fathom, but you need not to feare. If you wil ankor under it for n. e. or e. winds, then ankor betwixt the land & the Island, so that the foresaid bare gray n. w. point stand n., and the southermost e. from you, in 9 or 10 fathom. Or if you wil ankor for a S., S. W., or W. winde, then run further in about by that a foresaid bare gray point, bring it S. S. W. from you, and ankor there in 7, 8, 9, or 10 fathom, there it is cleane ground of small white and black sand. A litle to the northwards of the Island is a great Bay on Gotland, there you may also ankor in 7 and 8 fathom, for westerly winds.

If you wil sail in or out, to the n. wards of Eastergore then com not very near the Island, because there lieth of a riff from the East point farre into the Sea, which is a great half a league without the land, not deeper then 2 fathom and a half stony & very uneven, & is to be thought, that nearer to the land it is shoulder and fouler. From the S. E. side runneth of a flat, a good wayes to Seawards, at some places not deeper then 3, 4, and 5 fathom, and also very uneven, whereof you must take heed.

Four leagues N. and by E. from Eastergore lieth a haven, called Sliet or Sliet haven, lying in n. and n. and by w., behinde some litle Islands, there it is good lying for easterly, westerly, and north windes. Upon one of the northermost litle Islands standeth a ruinous church. You must come in there alongst by the shoare from the southwards. From thence to Faro-sound the coast lieth n. and by w. 2 leagues.

Faro-sound you may run into, in 2 and 3 fathom water, there standeth a church with a flat steeple upon the land. From Faro-sound lieth a foule dangerous riff, a league and a halfe, or 2

leagues into sea, call Salfonteyn, you must take very good heed thereof, when you wil run about to the n. wards of Gotland.

From Faro-sound to Gotsche sand, the course is N. N. E., about 7 leagues.

A halfe league to the n. wards of the towde Calmer, to wit, a litle to the n. wards of the road lieth an Island, called Skalloe, skallo, which you must leave on the starboard side, when you are bound from Calmer to the n. wards: It is different cleane upon the west side, but from the Sweeds side there over against it runneth of a stone rif, almost unto the Island. Upon this riff standeth commonly a stone-beacon it is dangerous to saile through there, or over that should, for one that is not there very well acquainted: It is also Pilots water.

Four leagues to the n. wards of the Calmer, on the Sweeds side, lieth an out point, called Schenknes, or Skegnesse, thwart of it lieth a small Island, called the Baker; betwixt this point and Skallo it is very uneven of depths.

About 2 leagues more northerly over against it, on Oeland lieth Borckholm, a litle to the n. wards of it lieth Copingwy-ke, where men do lade many Toomb-stones and other stones, with a northerly winde it is bad lying there.

Northwest or somewhat westerly from Borckholm, about three leagues on the Sweeds side, lieth a haven in the rockes, where men do lade Beames, to the n. wards of it, n. w. & by n. from Borckholm lieth Munsteras, that is a good haven also for very great ships.

From Calmer to the Sweeds Ioufer, the course is N. N. E. 9 or 10 leagues, this is a round rock, and very high, you may see it alongt over Oeland, being a good wayes to the e. wards of Oeland, it is not very great, but cleane round about, so that you may ankor neare under it on every side in 18 and 19 fathom, but by reason that it is not broad there cometh in (with hard windes) a rowling Sea.

From the Sweeds Ioufer to the channell of Westerwyke, or Silbuy, the course is n. n. w. 8 leagues, but from Northeroorden the n. end of Oeland n. w. 9 leagues.

The channel of Westerwyke and Silbuy is called Idesound, after a great rock lying on the north side of this channell, called Ydehoe, of from it lie many rockes, some above and some under water 2 great leagues to seawards which are called the Idebanks.

He that will saile from the n. end of Oeland towards the bar-sound, and by bare windes doth come a litle to the w. wards, without the right faire way, must be very carefull, and take good heed that he get not in amongst them.

For to know the channel of Westerwyke, you shall see a high bare rock, bring that n. w. from you, and saile so right it, and then you shall fall with the land right before it, and then also you shall espy another bare rock, whereupon standeth a Fishers beakon, and also another to the S. wards of it, with a maft, saile in betwixt the 2 rockes, the channell lieth in N. W. and N. W. and by N., when you are come within them you may saile alongt through the rockes, where you desire to be, to Silbuy, Strixholm, Flurbuy, Vrouwenbergh, Westerwyke, up to the n. wards to Schelsuyt and other places more there it is all cleane ground, and 12, 15, 18, and 20 fathom deep.

If you be bound to Silbuy, then saile up to the n. wards or e. Silbuy, wards untill you come before the towne, and ankor there in the middest between the rockes in 7, 8, and 9 fathom.

If you be bound to Flurbuy, or Vrouwenbergh, then saile in west, and west and by north through the rockes till you come against the maine land, there you may ankor before Fleur-buy, or saile up northwest betwixt the Island of Vrouwenbergh and the maine land, and ankor there in 12 fathom, also you may run through that way until you come to Westerwyke. Westerwyke lieth from Silbuy through within the rockes west, and west and by north, there it is in the faire waye 15 and 16 fathom deep.

From Silbuy to Schelsuyt it is northnorthwest 7 leagues, alongt through within the rockes. Schelsuyt is a good haven, there lieth a rock in the havens mouth, about which you may run in on both sides, and ankor before the town.

To the eastwards of Schelsuyt lieth the Hondtsbay and the Green Island, there it is also good anckoring. You may run from Silbuy alongst by it untill you come in the Sound of Sound, ther coppen and Northercoppen.

From the channell of Westerwyke to the Bar-sound, the coast lieth alongst by the rockes n. and by e. 8 leagues. But from the n. end of Oeland to the Bar-sound the course is n. and by W. 16 leagues, go not more westerly, that you get not into the sunk-ken rockes and foule grounds of the Idebanks.

The north end of Oeland runneth somewhat farre off flat. If you runne out close by Oeland, and saile on north and by west,

Schenknes
The Baker

Borckholm
Coping-
wyke.

Munsteras.

Sweeds
Ioufer.

Idesbanks.

Fleurbuy.

Wester-
wycke.

Schelsuyt.

Hondtsbay
Green
Island.

Barfound. west, then you run alongst farre enough without the Idebanks, and also shall fall with the land about a halfe league to the S. wards of Barfound against a deal of low out rocks. It seemeth a far of (by reason of the multitude of rocks and little Islands to be all firme land, but comming near it, it is all broken. You shall see there also an Island by which there semeth to be a channel, but you must be further to the n. wards, run alongst by the coast in 7 fathom, so long until that you see out a head high Out-rocks, these shall be the Heerscharen, which are very foule, and lie of from the N. point of the channell, a good wayes E. S. E. into sea, at which you must leave on the starboard side, and run alongst by them unto the Channell.

**Heerscha-
ren.**

When as you come out of the sea, you must take very good heed, that you fall not with the land to the Northwards of the channell, that you do not get into the foresaid Heerscharen. When you come before the channel, you shall see 2 Sounds or goings in, the southermost semeth to be the broadest, & fairest, but northermost is far the best, & lieth in N. N. W.

On the n. side of the channel lieth a great rock with a beacon upon it, and somewhat more to the n. wards sheweth a round hil, by al which marks this channel is very good to be known, when as you are right before the norther channel, & do see open into it, then saile it n. n. w.; being come in about a shot of a cast peece, you shall see on the larboard side 2 litle low Islands, ankor within them in 17 or 18 fathom, there you must hire a Pilot to bring you up, either to Southercoppin, or Northercoppin, where you desire to be, it is Pilots water. It is from thence to Southercoppin, about 10 leagues, but to Northercoppin 18 leagues. In the comming in of the Sound is good ankor ground in 10 fathom. Within in the Sound it is broad and wide, and al over good ankor in 18 and 20 fathom.

**Talder-
found.**

About an English mile within the Sound you leave (in sailing up) the Talderfound on the larboard side, there is no more then 6 or 7 foot water, from thence you edge up n. and also n. e. a half league, then again west and by South about 2 leagues, afterwards westnorthwest a league unto Karholm, which is a Gentlemans house with a mill.

From Karholm to Stickbrough is further west about two leagues, that is a castle upon a litle Island, you must go about to the southwards of it through a bridge.

Stickborg.

From Stickbrough saile up alongst the Sound, & leave most of al the rocks (which you see) on the larboard side, except one of two a litle above Stickbrough, leave them on the starboard side. About 2 leagues past Stickbrough standeth a Gentlemans house called Mem, there is the place where men do lade, a half league from Southercoppin.

Brawyck.

For to saile from without the Northercoppin, you must run in by the Swartboden up westwards unto Schenes and Brawyck, & alongst unto the Brawyck the found of Northcoppin, or else you must come in at the Barfound through within the rocks into the Barwyke unto Northercoppin, but it is not to be done without a Pilot for them that are not there very well acquainted, for it is Pilots water.

Hevering.

From the N. end of Oeland to the channel Nycopping by the Hevering, the course is due N. about 12 leagues, but if you run close alongst by the end of Oeland, you shall fall with the land a litle to the W. wards of the Hevering. The Hevering is a great reddish bare rok, whereupon stand 3 or 4 Fishers beacons, heretofore there was wont to stand upon it a barrel upon a mast, which men might see far of at sea, but it is taken of in the last was between the Kings of Sweden and Denmarck, now there standeth nothing upon it but some Warders.

**Swartbo-
den.**

Two great leagues to the w. wards of the Hevering, to wit, W. S. W. from it, lie the foresaid rocks called the Swartboden, which are great rocks, and are sometimes mistaken for the Hevering, you may saile in also by these Swartboden, and run through within Oxelen & the other rocks, & come by the point of the Hommelwyke into the right found of Nycoppin.

When you come before the channell of the Hevering, you can at first hardly see a channell, or any opening, but bring the great rock the Hevering n. w. from you, and saile so right in, and run in close alongst to the northwards of it. In the sailing in you shall see two channels, the northermost is within full of dangers, so that you can not go through there. The right channel by the Hevering is so narrow, that you can hardly turne to and again there.

**Hommel-
wycke.**

From the Hevering you must saile in first n. w. a league and a half, or 2 leagues, unto a great rock, leave it on the starboard side, and saile about by it, and goe in alongst northwest and by north. A litle within the foresaid great rock, thwart off the point of the Hommelwyke, you shall finde also a great rock on the starboard side, you may run about to the westwards of it untill you come within the other rocks and litle Islands, and

ankor there in three fathom soft ground: but if you wil ankor there, then you must shun somewhat the the west end of the great Holm, because of a suncken rock that lieth even without the point of the rock. From that foresaid road unto Hassell-holm the course is yet in alongst N. W. and North; but with ships of great draught you must ankor before the channell of Hassell-holm. From the Hevering to the Hassell-holm it is in all about 3 or 4 leagues.

From Hassell-holm alongst upwards through the stonereach, it is not deeper then 9 foote, you must also (if you will saile up there) first let the rockes, or suncken rockes with beacons with your boat, or else you should sometimes saile upon some of the rockes in 7 foot depth. The narrowest of the stonereach is thwart of an Island which you must leave on the staaboard side, of from which lieth a suncken rock in the narrow, you must goe close alongst by the suncken rock, for to the westwards off it is very shoud water. Being past this stony ground, you shall get oasse ground, where it is not deeper then fixe foot; being come over that by the town Nycopping, it is again eight foot deep, but stony ground. The ships lie without the towne thwart of the beacons over against the Castle, which lieth on the west side of the river.

From Hassell-holm to the town Nycopping it is about a league first up N. and by W., and afterwards west. For one that is acquainted, it is not well to saile up, it is also Pilots water, so soone as you come within the channell, you can get a Pilot to bring you, where you desire to be.

From Nycopping you may saile alongst through the roks to the N. wards of Hassell-holm unto Trofa and Telgen.

Landsoort (which is the w. point of the Liet of Stockholm) Landsoort lieth from the Hevering E. N. E. distant 7 or 8 leagues.

About halfe waies betwixt both lieth a great high rock very good to be knowne, a good waies without the land alone called Hartfoe, & litle league to the w. wards of Landsoort lie also some foule out rocks, called the Heyrhamer. When as you sail from the Hevering on e. n. e., then you run alongst a litle without the Hartfoe, leaving it on the larboard side. With that course, you can not also saile to neere the Heirhamer, and then you leave it lying also on the larbord side towards the land.

The land to the w. wards of Landsoort lieth w., or w. and by S., with divers great rockes and havens where you may saile in to. About a league to the westwards of it lieth a haven within a low rock in betwixt 2 other low rocks, there you must make you fast with cables on both shoares, and with an ankor in the Sound. Before the havens mouth lieth a high round rok, which shutteth the havens mouth.

A litle to the westwards of Hartfoe goeth in a haven or Deep, where you may run through with Barks within Elsnap unto Stockholm.

A litle to the westwards of that Deep lieth the Sound off Telgen lying in northwest, allmost unto the great Lack de Meller, upon the end of that Sound lieth Telgen, but at the mouth of the Sound lieth the litle Towne Torfa.

About an English mile southwest from the point off Landsoort, lie two rockes even with the Water, and within these rockes close by Landsoort lieth also a suncken rock. He that commeth faom the S. wardes, being bound to Stockholm, and falleth with the land to the westwards of the point of Landsoort, must take heed of them; you may saile within these two rockes (lying even with the water) to wit, betwixt them and the foresaid suncken rock, and also (as the Pilots say, you may saile through within the suncken rock, that is, betwixt the suncken rock and the maine land.

Landsoort and N. point of Oeland lie S. S. W. and N. N. E. distant three and twenty or foure and twenty leagues. If you saile on northnortheast from the North end of Oeland, you shall fall with the land right with Landsoort or a litle to the eastwards of it. It is better to fall with the land somewhat to the westwards of it, then to the eastwards of it, to the westwards the land is better to knowne then the rockes to the eastwards of it. Therefore when as you wil saile from the North end of Oeland to Stockholm, especially in dark wether, goe on somewhat more northerly then northnortheast, or N. and by E., and then you shall runne sight of the foresaid rock Hartfoe, which is good to beknowne.

The Liet of Stockholm goeth in N. E. by the point off Landsoort. About a league east from the point ly some black rocks, some above and some under water, called the Karwasen. Betwixt them and the point, about once so neare the Karwasen, as the point, lieth an other black rok, not great, called the yong Karwasen, betwixt that rock and the point of Landsoort, men doe saile into the channell of Stockholm. Close to the point lieth also a litle Island which you must leave on the larboard side,

Wigstone. side, and run alongst to the eastwardes of it, a league northeast from the point lieth the Wigstone, lying southeast or E. S. E. thwart of from the shore. This a somewhat a long rock with 3 hommocks, the two westernmost are the greatest, and shew like a saddle, the easternmost hommock is the smallest, upon it standeth a little walled cape, you must saile alongst to the eastwardes of it, and leave the rock on the larboard side. You may well saile also about to the westwardes of this Wigstone, it is cleane round about, but on the westside it is narrowest, betwixt it and the land lieth also a rock, with a little rock off from it, which you must avoid.

Middlestone. A league N. E. from the Wigstone lieth the Middlestone, which is a great high rock with a great cliff or saddle with another great rock a little to the westwardes of it: you can not saile through betwixt them, they are fast one to the other with rockes. In sailing up men leave this Middlestone on the starboardside, and run about to the westwardes of it.

Gombergstone. From by east the Wigstone to the Middlestone, to wit, alongst to the westwardes of it, the course is northnortheast. About a great English mile east from the Wigstone, and North from the Karwaten lieth another rock, called the Gomberghstone, and to the eastwardes off it another, called Schaeropen. When you saile from the Wigstone to the Middlestone, you leave them both on the starboard side.

Ramskloof. Thwart of the Middlestone, on the Westland lieth the haven of Ramskloof, there you may ankor within the rocks. The Middlestone lieth about a half league southwest from the east point of the Liet, to wit, from the east point of the main land, or the Swedeschares, betwixt them both goeth in a channel, called the Danske channel. For to saile in there you must avoid the foresaid east point a good wayes of (whereupon standeth a mill) and run in by the Middlestone, or from that point runneth of a great ledge of rocks a good waies to seawards, towards the Middlestone. From by west the Middlestone to Elfnap, the course is N. E. 3 leagues.

Redkow. When you are a litle past the Middlestone, you come in betwixt the 2 lands, & a litle within the east point you shal meet with a rok in the fareway, called the Red-cow. You may saile about it on both sides, but men leave it commonly on the starboardside, within that rok, that is on the n. side you may ankor.

Elfnap. Elfnap is a haven behinde 2 litle Ilands, where the Kingships of wart do commonly lie to tarry for a winde, when they are bound to sea, there it is very good lying, when with contrary windes you can neither get up nor down, you can come in and out there both from the n. wards and from the S. wards very conveniently. Comming from the southwardes, you can see over the southernmost litle Iland, the masts of the ships that lye behind it. For to saile in there behind it, run in about by the S. point of the Iland Elfnap behind it, and then you leave a litle black rock on the southside of the havens mouth, lying on the larboardside. Betwixt the 2 litle Ilands of Elfnap runneth also a channell through where you may go through with Huyes and smal ships. From thwart of Elfnap, the course is inwards n. n. e. about 2 leagues, to the Red-holm, that is a great Red round rock grown full trees, to the westwardes of it lieth another smaller bare rock, the fareway is there in through betwixt them, and about a musketshot broad. In this narrow it is al over good ancker ground. From the n. end of the Redholm lieth of a great row of rockes unto the east shore of the Liet, where you must saile through. When as you saile through betwixt the Redholm and the foresaid bare rock to the eastwardes of it, go then on yet about an English mile further n. n. e. untill you come thwart of the fourth channell to tel of from the Redholm, which lieth through the foresaid row of rockes to the northwardes of Red-holm, that is called S. Johns Channel, it lieth through about n. n. w. or somewhat more northerly, it is a short

Redholm. Inlet, run through there. Being through S. John channel, goe again in n. n. e. about an English mile to the Red-holm, which is a long rock upon it stand 3 barrels upon masts, this you must leave on the larboardside, & run alongst to the eastwardes of it.

S. Johns channell. From the N. point of that Redholme runneth of a litle riffe or should, which you must avoid. From the Redholm unto the

great Daler. great Daler, the course is n. w. and by n., that is a haven on the westside of the Liet, there lieth a Church-yard within on the land, where the slain Poles people in the last Polish wars lie buried. Thwart of that Church-yard is a sandbay, there is good ankor ground, like as is all over in that foresaid haven. At the N. point of the haven the great Daler lieth a suncken rock close by the land, called the Saltfack, upon which is no more then 9 foot water. From the great Daler, the course is alongst N. E.

little Daler. a half league unto the litle Daler, which is a high steep rock, the highest that you find amongst all the rocks in the Liet, run alongst to the westwardes of it, and leave it on the starboard si-

de. Over against it on the W. side lieth another rock, which is called also the Daler, to the westwardes of it, to wit, betwixt that rock and the main land, is also an opening, where you may sail through. A litle within that foresaid rock on the west land goeth in the Hardstick which is a Sound that lieth in first W., and west and by north, a goeth wayes in, and then N. W. and cometh into the Liet to the northwardes of Waxholm, by Kings haven Majesty hath caused to sinck some shipt in the mouth of the Sound, so that men can not goe through here with great ships, but onely with litle barcks. From the litle Daler, the course is N. N. W. about a halfe league to Steendeur, a great Iland, which you must leave on the starboard side, and run close alongst by it, and so you shall leave a round aock to the southwardes over against it on the larboard side, and saile throug betwixt them: this channell lieth through N. W. At the west end of the great Iland Steendeur lieth a litle black rock, you must run about by it again to the eastwardes.

From Steendeur to Kow-haven; the course is eastnortheast two leagues, that is a rock lying in the broad Sound, leave it on the starboard side, and sail to the westwardes of it alongst by the west land unto Berck haven. Betwixt both about half waies lieth a haven, called the Crosse-haven, there it is good lying for west and northwest wind.

Berck-haven lieth from Cow-haven northeast and by north distant about two leagues: this is a haven betwixt two Ilands where is good anckoring for all wind, as well for them which come from Stockholm, and desire to saile to the Northbodem, as also for them that will saile of towards Landsoort, there is (like as at most places betwixt the rocks and Ilands) good clay gtound. When you come from Kowhaven, and are bound to Stockholm, you must leave these two Ilands of Berck haven on the starboard side, and run in about betwixt them and the point of the maine land. From the narrow betwixt Berckhaven and the foresaid point to Duer-haven, the course is northwest about a halfe league. On the S. W. side of that fareway thwart of the point over against Duer-haven; lye two suncken rocks on each side of the point one, the one on the northwest side, and the other on the southeast side, commonly there standeth upon each of them a litle tree for a beakon.

From the point of Duer-haven unto the Dray-bome, the course is southwest and by west somewhat westerly about a half league, it is called also the Duer-haven, of from the point within the Ilands until you come before the buye, alongst there, and also within the Ilands, it is good lying every where.

The litle Ilands which lye in the channell of the Draybo- me, you must leave them on the starboard side of you.

From the Draybome to the Windstream, the course is first n., and n. and by w. untill about half wayes, there you shall find a litle Iland with a litle tree, leave that on the larboard side, & goe from thence in n. n. w. to the Windstream. In the Windstream is a good anckoring by the shore, except in the n. end of the stream, there is no ankor ground. From the Draybome to the Windstream it is about a league distance.

From the Windstreame to the Seugh, the course is w. n. w. a half league, that is a chindle or stonebank even with the water, run alongst to the n. wards of it, & leave it on the larboard.

From the Seugh to Scheggen, the course is w. and by n. a league, run alongst there by the S. shore. When you come against Scheggen, you shall see upon the point of the S. shore a litle round tree, over against that litle tree somewhat more northerly then in the middle of the channell, lieth a suncken rock; for to avoid it you must run nearest the south shoare. The reach of Scheggen lieth through w. and by s. about an English mile, it is narrow, but hath every wher ankor ground.

From the Scheggen, the course is w. s. w. an English mile to Steckfound, or w. to Kings deep, the litle Ilands on the starboard side, as you saile to Steckfound, are cleane round about, so that you may goe on all sides about by them.

Comming close to Steckfound you shall finde a suncken rok a litle by S. the fareway. The Steckfound lyeth through S. S. W. it is a short Inlet about a cables length long.

From Steckfound unto Waxholm it is s. w. westerly above an English mile. Upon Waxholm stander the Kingscastle, there al the ships are visited wheter they go up or down, the channell there by it, is paled to so near, that they can shut it with a boam.

From Waxholm to the Wester reach, the course is west s. w. and through the Wester reach southwest. From thence alongst west to Eldam, that is a very narrow channell a litle more then a ships length broad.

From Eldam, the course is west to Mousholm, which is about a league from Waxholm, men leave the high rough Mousholm on the starboard side, and run alongst by it to the southwardes.

From the Mouse-holm to Kings-haven it is a league West, and West and by north al alongst by the southland.

From Kingshaven unto the town Stockholme, the course is northwest, and northwest and by west also a league distance alongst by the shoare. When you come before the towne, you may anckor where you please.

He that falleth to leewards or by any other accident can not come by Landsoort into the Liet of Stockholm, he may fail in more to the northwards through divers channels. Amongst others there is one where men may saile into, and come by the great Daler into the Liet: there goeth another in by the Swedes-sand, through it men come by Berckhaven into the Liet. The knowledge of this channell is a very high rock, with another that is not so high, thereby to the southwards off it, betwixt these two rocks goeth in this channell, it is very narrow in the comming in, not above two shippes lengths broad. So soon as you come in within these rocks, you may edge up about by the lowest, which is the southermost, and anckor under it in very good anckorground.

From that road in the Swedes sands the sound goeth up first about northwest, and northwest, 5 leagues unto Bercker haven into the Liet of Stockholm. This a very good channell as well for to saile in as out, but because it is not easie to know, comming in out the sea, it is seldom used.

The S. wards or the w. wards of these two foresaid rocks, at the comming in of this channell, it is all low land. If you come from the southwards, and run alongst by that low land, so long untill that you begin to get the high land, you shall also run in fight off these two foresaid hommocks. About a league to leewards from them, lie three or four small rocks; for to saile in there you must leave them on the starboard side, and in sailing out on the larboard side.

Of the Depths and grounds about these coastes.

Betwixt the S. ends of Oeland and Gotland in the farewaye, it is uneven for to sound, sometimes men have 22, 23, and sometimes againe 28, 29, and thirtie fathome, all black mingled ground, sometimes stones so great as pease, of coullour like black earth.

When Houbrough is N. N. E. 7 leagues from you, there it is fifteen fathom deep, stonie ground, from thence on north E. two leagues, there it is 20 fathom deep, foule stonie ground. Neare about these places, so far from land that you can not see Gotland, are bancks, where it is not deeper then 12 fathome. The like uneven grounds are also thwarte of the South ende of Oeland, as hath bene saide in the Somer, but betwixt them both is deeper water. If you come in the farewaye from Rye to Brontholm betwixt the South endes of Gotland and Oeland, and must lie by with contrarie windes when you are in the 10 or 12 fathome, and then saile towards Oeland, you shall get deeper water.

If you lie by betwixt Oeland and Reefcoll, and that Reefcoll come to bee S. S. E. and S. and by east from you, so farre without the land, that you can not see it, then you shall get also the like uneven ground of tenne and twelve fathome, redde grosse stonie sand, and also blackish grosse sandie stonie ground. If you be nearest to Oeland, you shall get, in 10 or 12 fathome pittes in the fallowe, so that it seemeth, that these grounds of Oeland doe run over unto, or neare Reefcoll. The like grounds an unevenesse doe seeme to lye over the sea also from the S. ende of Gotland towards Rose-head: for when the South ende of Gotland commeth to be about n. from you although it be fourteen or sixteen leagues from you, you shall finde depth of sixteen and twentie fathom soft grounde, like as of from Oeland, but if Gotland be more easterly or westerly from you, you shall have deeper water.

When you are about a league by west the southwest point of Gotland, so that it be Southeast, or eastsoutheast from you about a league, then the Carels lie about north from you,

which you may even see in cleare weather, thereabouts it is shoulde water a good wayes of from the shoare. When the west pointe or steepe pointe is about n. from you a litle to the Eastwards or to the w. wards of it, there is 10, 12, 14, 16, and 18 fathom deepe, a greates wayes from the land: but when that point commeth to be N. E., eastnortheast, or east from you, there it is above the fortie fathome deepe.

Betwixt the S. west point of Gotland, & the north point off Oeland it is also verie deepe, so that there you can not cast ground with 40 fathome.

When you are N. W. and N. W. and by North about 2 leagues from Houbrough, there you have great redde stonie sand, and black stones in it, so great as beanes.

Betwixt Gotland and the Swedes schares in the farewaye it is 34, 36, and 38 fathom deepe, and close by Gotland five and twentie fathom.

When the tower of Houbrough is w. n. w. from you, so farre as you may see it from the poepe, there it is 30 and 31 fathom deepe, but being northnorthwest from you it is shoulder, 25 and 26 fathom.

Betwixt Houbrough and Eastergore lieth a banck of 24 fathom, grosse redde sand, so farre without the lland, that you can not see the land out the top. To the E. wards of it lieth another banck or 14 fathom gray and white sand, when you are over it, you shall have no ground in fortie fathom.

Two leagues without the land, by west Eastergore, there it is about 31 fathom soft ground.

He that saileth from Brontholm alongst by Oeland towards Eastergore, let him not spare his lead, but sound often for these foresaid bancks and groundes, thereby you may well make some reckoning.

If you should make reckoning to come by night with Gotland on the s.e. side, and have no good sight, then come no nearer the land (about the n. end or S. end, and also by Eastergore) then in 20 or 24 fathom, and so you can take no hurte by night. By day you may come neare enough to it at many places, in 7, 8 or tenne fathom.

How these lands doe lye one from the other, and from other lands.

From Houbrough to Eastergore northeast	12 or 13 leagues
From Eastergore to Faro. sound north and by east	7 leagues
From Faro. sound to Gotsche sand n. n. e. and n. and by e.	6 or 7 leagues
From Houbrough to the Carels northnorthwest	7 leagues
From the Carels to Wisbuy N. N. E.	7 leagues
From the Carels to Gotsche sand northeast	22 leagues
From Houbrough to the north ende of Oeland n. w.	12 leagues
From the Carels to the Swedes Iouckvrow west and by n.	13 leagues
From the Carels to the channell of Stockholm north	21 leagues
From the Carels to Boeckschaeer n. e.	40 leagues
From Gotsche sand to Boeckschaeer north and by east	10 or 11 leagues
From Gotsche sand to the south point off the Alands	33 or 34 leagues
From Gotsche sand to witto N. E.	37 leagues
From Gotsche sand to Dageroore east and by N.	7 leagues
From Gotsche sand to Derwinde southeast and by east	31 or 32 leagues
From Eastergore to Dageroore N. E. and by east	37 leagues
From Eastergore to Derwind east and by south	27 leagues
From Eastergore to Quinsbrough deepe south and by east	50 leagues
From Eastergore to Rosehead south and by west	45 leagues
From Houbrough to Hondforte e. n. e. and n. e. and by e.	47 leagues
From Houbrough to Lyserorte e. and by n. somewhat easterly	40 leagues
From Houbrough to Derwind east and by n.	37 leagues
From Houbrough to Dermemell southeast and by east	40 leagues
From Houbrough to Quinsbrough deep southsoutheast	48 leagues
From Houbrough to Rosehead south	34 leagues
From the north end of Gotland to Derwind eastsoutheast	29 leagues
From Calmer to Scheggenges northnorthwest	4 leagues
From Scheggenges to the Swedes Ioufer N. N. E.	7 leagues
From Swedes Ioufer to Idesound, the channell of Westerwyke, or Silbuy, N. and by west, somewhat westerly	8 leagues
From the Swedes Ioufer to Northeroorden, the north end off Oeland east and by north	3 or 4 leagues
From Northeroorden to the channell off Westerwyke n. w.	9 leagues
From Northeroorden to the Barfound, n. and by west	16 leagues
From Northeroorden to the Hevering, or to the channell of Nycopping n. e.	11 leagues
From Northeroorden to Hartfoe n. and by east,	23 leagues
From Northeroorden to Landsoort N. N. E.	23 or 24 leagues
From Hevering to Landsoort eastnortheast.	7 or 8 leagues

How these Lands doe shew themselves at sea.

West point.

Houbrough.



Thus sheweth the west point or northwest point of Gotland, when you come from the southwards.



When Gotsche sand is n. e. from you 2 leagues it sheweth thus.



In this forme sheweth the land a litle to the westwards of Eastergore, when that point is a great league west from you, there is 24 and 25 fathom deep, soft ground.



Eastergore being a leag. w. from you, sheweth thus, there it is 25 fathom deepe.

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